

# **EMC® Documentum® D2**

**Version 4.2**

**Administration Guide**

EMC Corporation  
Corporate Headquarters:  
Hopkinton, MA 01748-9103  
1-508-435-1000  
[www.EMC.com](http://www.EMC.com)

**Legal Notice**

Copyright © 2005–2015 EMC Corporation. All Rights Reserved.

EMC believes the information in this publication is accurate as of its publication date. The information is subject to change without notice.

THE INFORMATION IN THIS PUBLICATION IS PROVIDED "AS IS." EMC CORPORATION MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND WITH RESPECT TO THE INFORMATION IN THIS PUBLICATION, AND SPECIFICALLY DISCLAIMS IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Use, copying, and distribution of any EMC software described in this publication requires an applicable software license.

For the most up-to-date listing of EMC product names, see EMC Corporation Trademarks on EMC.com. Adobe and Adobe PDF Library are trademarks or registered trademarks of Adobe Systems Inc. in the U.S. and other countries. All other trademarks used herein are the property of their respective owners.

**Documentation Feedback**

Your opinion matters. We want to hear from you regarding our product documentation. If you have feedback about how we can make our documentation better or easier to use, please send us your feedback directly at [IGDocumentationFeedback@emc.com](mailto:IGDocumentationFeedback@emc.com).



# Table of Contents

---

<b>Chapter 1</b>	<b>Understanding the Configuration Matrix and Contexts .....</b>	<b>13</b>
	Introduction to D2 Config .....	13
	Understanding the Configuration Matrix .....	13
	Organizing the Configuration Matrix.....	14
	Configuring Contexts.....	15
	Configuring Application Filters and Permissions .....	16
	Understanding Parent and Child Configurations .....	16
<b>Chapter 2</b>	<b>Defining Repository Terminology.....</b>	<b>19</b>
	Defining Terminology Using Dictionaries .....	19
	Defining Terminology Using Taxonomies.....	20
	Configuring a Dictionary.....	21
	Importing a Large Dictionary .....	22
	Configuring a Taxonomy .....	23
	Storing a Registered Table.....	23
<b>Chapter 3</b>	<b>Configuring Content Creation Components .....</b>	<b>25</b>
	Determining Which Creation Processes to Use .....	25
	Configuring Autonaming .....	28
	Configuring a Property Page .....	30
	Configuring Value Assistance Fields .....	36
	Configuring Property Conditions.....	37
	Configuring Inheritance.....	39
	Configuring Security .....	40
	Understanding Minimum Security Rights.....	42
	Editing a Security Model .....	42
	Configuring Security Inheritance.....	43
	Configuring Auto Link .....	43
	Configuring Template Lists.....	46
	Setting Up Thumbnails for Template List Previews.....	47
	Configuring Virtual Document Templates.....	47
	Configuring Linked Documents for Creating or Importing Content .....	48
	Configuring Checkin .....	49
	Configuring Checkout .....	50
	Configuring Uniqueness Check .....	51

---

	Configuring Mass Update.....	52
<b>Chapter 4</b>	<b>Configuring Content Creation Defaults .....</b>	<b>53</b>
	Understanding the Content Creation Process.....	53
	Configuring Creation Profiles.....	54
	Configuring Default Value Templates .....	56
	Configuring Linked Documents for Importing Emails.....	57
	Configuring Importing Email Attachments.....	58
	Configuring Importing Folder Structure .....	59
	Configuring XML Import.....	59
<b>Chapter 5</b>	<b>Configuring Content Processes Components .....</b>	<b>61</b>
	Understanding Lifecycles .....	61
	Configuring a Lifecycle .....	62
	Configuring a Lifecycle Batch .....	66
	Understanding Workflows .....	67
	Configuring a Workflow.....	68
<b>Chapter 6</b>	<b>Configuring D2 Search .....</b>	<b>75</b>
	Configuring Global Search Settings .....	75
	Configuring Advanced Search.....	78
	Configuring a Query Form Search .....	78
<b>Chapter 7</b>	<b>Configuring Administrator-to-User Communication.....</b>	<b>81</b>
	Understanding How to Communicate with Users Through D2 and Email .....	81
	Configuring the Mail Server.....	81
	Configuring a Mailing List.....	83
	Configuring Options for Sending Emails through D2 .....	84
	Configuring a Subscription .....	85
	Configuring a Distribution.....	86
<b>Chapter 8</b>	<b>Configuring External Services.....</b>	<b>89</b>
	Configuring a Rendition Server Connection.....	89
	Configuring an Advanced Documentum Transform Services (ADTS) Rendition Server Connection.....	90
	Enabling a Branch Office Caching Service (BOCS) Element .....	91
<b>Chapter 9</b>	<b>Configuring D2 Config Tools .....</b>	<b>93</b>
	Configuring Relations .....	93
	Configuring Automated Delegation .....	94
	Configuring Fonts.....	95
	Configuring Access to D2 Client and D2 Config.....	95
	Configuring D2 Options.....	96
	Enabling Actions for Intelligent URLs .....	96

---

<b>Chapter 10</b>	<b>Auditing and Monitoring D2</b> .....	<b>97</b>
	Configuring Documentum Audit.....	97
	Configuring D2 Audit .....	97
	Monitoring D2 .....	98
<b>Chapter 11</b>	<b>Using D2 Config Configurations</b> .....	<b>99</b>
	Understanding D2 Configurations.....	99
	Backing Up a D2 Configuration .....	99
	Restoring a D2 Configuration .....	100
	Exporting a D2 Configuration .....	100
	Importing a D2 Configuration.....	101
	Importing a D2 Configuration Using a Command Line.....	101
	Resetting the D2 Configuration.....	102
<b>Chapter 12</b>	<b>Configuring D2 Client</b> .....	<b>103</b>
	Configuring a Gadget Server for D2 Client Widgets .....	103
	Configuring a D2 Client Workspace .....	104
	Designing a D2 Client Workspace .....	105
	Understanding the Border Layout Container.....	106
	Understanding the Tab Container .....	107
	Understanding the Accordion Container.....	107
	Understanding the Horizontal and Vertical Containers.....	108
	Configuring a D2 Client Theme .....	108
	Configuring an Internal Widget .....	110
	Configuring an External Widget .....	113
	Configuring D2 Client Menus.....	114
	Configuring Custom Icons for Rendition Formats and Content Types.....	117
	Configuring Icons and Text Color for Content Properties in List Widgets.....	118
	Configuring Display Filters .....	119
	Configuring D2 Client Column Preferences .....	120
	Configuring Access to Administration Widgets in D2 Client.....	121
	Refreshing and Reloading D2 .....	122
<b>Chapter 13</b>	<b>Configuring the Interface of D2 Client 3.1</b> .....	<b>123</b>
	Configuring Menus for D2 Client 3.1 .....	123
	Configuring Toolbars for D2 Client 3.1.....	125
	Configuring Themes for D2 Client 3.1 .....	126
	Configuring Treeview for D2 Client 3.1 .....	127
<b>Chapter 14</b>	<b>D2 Config Troubleshooting and Tips</b> .....	<b>129</b>
	Accessing D2 Config without Opening a New Browser Window .....	129
<b>Chapter 15</b>	<b>Configuring C2</b> .....	<b>131</b>
	Overview of C2 .....	131

---

	Configuring a Dynamic View Configuration.....	132
	Configuring a Dynamic Print Configuration.....	136
	Configuring a Dynamic Export Configuration.....	140
	Configuring a Static Configuration.....	145
	Formatting C2 Table of Contents using XSL.....	149
	Configuring C2 Administrator Access.....	149
	Clearing the dmi_queue_item After Creating a C2 Rendition.....	150
<b>Chapter 16</b>	<b>Configuring O2.....</b>	<b>151</b>
	Configuring the O2 Transfer Configuration in D2.....	151
	Configuring File Formats Recognized by O2.....	152
	Configuring Microsoft Office for O2.....	152
<b>Chapter 17</b>	<b>Using D2 Specs.....</b>	<b>155</b>
	Configuring D2 Specs Module Descriptions.....	155
	Generating a Specifications Document.....	155
<b>Chapter 18</b>	<b>Using D2 Retention Policy Services (RPS).....</b>	<b>157</b>
	Understanding the D2 RPS Plug-In.....	157
	Adding Documentum RPS Policies to the Configuration Matrix.....	157
<b>Chapter 19</b>	<b>Using D2-Bin.....</b>	<b>159</b>
	Configuring D2-Bin.....	159
	Incorrect Properties for Content in the Recycle Bin.....	160
<b>Chapter 20</b>	<b>Optimizing D2.....</b>	<b>161</b>
	Optimizing Content Import.....	161
	Optimizing Property Pages.....	161
	Optimizing Searches.....	162
	Optimizing Workspaces.....	162
<b>Chapter 21</b>	<b>Formatting Date and Time.....</b>	<b>163</b>
	Understanding Date Formats.....	163
<b>Chapter 22</b>	<b>Widgets Reference.....</b>	<b>167</b>
	List of Widgets.....	167
<b>Chapter 23</b>	<b>Jobs Reference.....</b>	<b>171</b>
	List of D2 Jobs.....	171
	List of C2 Jobs.....	176
<b>Chapter 24</b>	<b>Custom Actions Reference.....</b>	<b>177</b>
	List of Custom Actions.....	177
<b>Chapter 25</b>	<b>Widget Communication Channel Reference.....</b>	<b>181</b>
	List of Widget Communications Channels.....	181
<b>Chapter 26</b>	<b>Reserved Words.....</b>	<b>201</b>
	List of Reserved Words in D2 when Using Documentum Application Builder.....	201

<b>Chapter 27</b>	<b>PDF Fields Reference .....</b>	<b>203</b>
	List of PDF Fields .....	203



# Preface

---

EMC® Documentum® D2 consists of two components:

- D2 Configuration: The web-based application, hereafter known as D2 Config, for administrators to use to configure settings such as automated content-handling processes and background settings for D2 Client.
- D2 Client: The web-based application, hereafter known as D2 Client, for users that provides the ability to interact with content in one or more repositories.

When this guide refers to D2, it refers to the product as a whole, not the individual components.

## ***Intended audience***

The information in this guide is for administrators who access and configure D2 using D2 Config.

## ***Revision history***

The following table lists changes in this guide.

<b>Revision Date</b>	<b>Description</b>
March 2016	Updated Widget Communications Channels section
August 2015	Updated the description of the AdminGroupsWidget in the <a href="#">List of Widgets, page 167</a> topic.
April 2015	<ul style="list-style-type: none"><li>• Added a note in the <a href="#">Configuring Auto Link, page 43</a> topic.</li><li>• Updated the description of the Default theme field in the <a href="#">Configuring a D2 Client Workspace, page 104</a> topic.</li><li>• Added additional information to an existing note in the <a href="#">Understanding Workflows, page 67</a> topic.</li></ul>
March 2015	<ul style="list-style-type: none"><li>• Added a note about configuring graphics in the <a href="#">Configuring Custom Icons for Rendition Formats and Content Types, page 117</a> topic.</li><li>• Added a note about creating query for repeating date attribute in the <a href="#">Configuring Advanced Search, page 78</a> and <a href="#">Configuring a Query Form Search, page 78</a> topics.</li></ul>

---

Revision Date	Description
December 2014	<ul style="list-style-type: none"><li>• Updated the <code>\$ddlvalue</code> keyword name in the <a href="#">Configuring Security, page 40</a> topic.</li><li>• Added a note about default value for repeating attribute <code>r_creation_date</code> in the <a href="#">Configuring a Query Form Search, page 78</a> topic.</li><li>• Updated the description of <code>BrowserWidget</code> in the <a href="#">List of Widgets, page 167</a> topic.</li></ul>
November 2014	Added a note stating automated delegation is not supported.
July 2014	Added a note about using the DQL statement with parenthesis in the Required condition in the <a href="#">Configuring Property Conditions, page 37</a> topic.
January 2014	Initial Release.

## Understanding the Configuration Matrix and Contexts

This chapter contains the following topics:

- [Introduction to D2 Config](#)
- [Understanding the Configuration Matrix](#)
- [Organizing the Configuration Matrix](#)
- [Configuring Contexts](#)
- [Configuring Application Filters and Permissions](#)
- [Understanding Parent and Child Configurations](#)

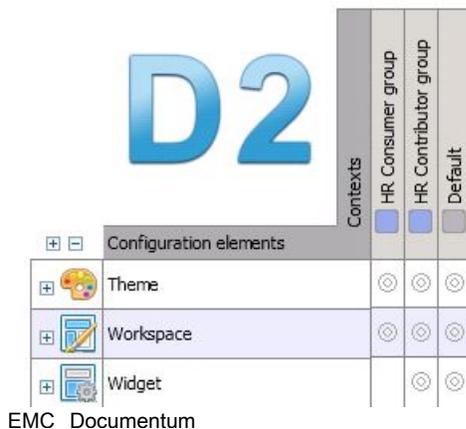
### Introduction to D2 Config

D2 Config is the administration client of Documentum D2. You can use D2 Config to:

- Customize the user interface of D2 Client for end users.
- Configure automatic processes run by D2.
- Configure actions available to end users in D2 Client.
- Configure interaction with external applications such as Documentum Administrator, rendition servers, and retention policy services.

### Understanding the Configuration Matrix

The configuration matrix is the user interface that you use to control the application of configuration elements to contexts as shown in the following screenshot:



The screenshot shows the D2 Configuration Matrix interface. It features a table with configuration elements on the left and contexts on the right. The 'D2' logo is prominently displayed in the top left. The table has a header row for 'Contexts' and three columns: 'HR Consumer group', 'HR Contributor group', and 'Default'. The 'Configuration elements' section includes 'Theme', 'Workspace', and 'Widget'. Each cell in the matrix contains a radio button to indicate the configuration element's application to the context.

Configuration elements		Contexts		
		HR Consumer group	HR Contributor group	Default
<input type="checkbox"/>	Theme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Workspace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Widget	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EMC Documentum

To use the configuration matrix:

- Create a configuration component: Configuration components are the types of configurations, such as autonaming and security. Specific instances of configurations are saved as configuration elements, shown as collapsible rows in the vertical Y-axis of the configuration matrix. For example, you can create a security element for quality assurance draft writers with WRITE access. You can access the element by expanding the Security configuration component.
- Create a context, shown as the horizontal X-axis of the configuration matrix. Contexts logical groupings of content qualified by conditions composed of properties such as document types, DQL conditions, and user groups. Contexts determine when a configuration element applies to content within the repository. For example, you can create a context that applies for all dm\_document content types created for quality assurance and set to the Draft status.
- Apply the configuration element to the context. For example, applying the configuration element to the context created in the first two examples leads to a configuration such that the Draft dm\_document quality assurance content provides quality assurance draft writers WRITE access.

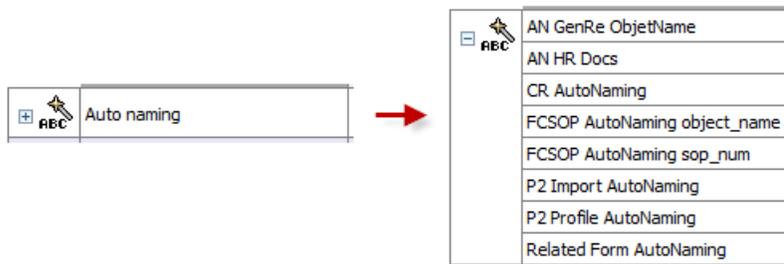
## Organizing the Configuration Matrix

You can organize the configuration matrix in three ways:

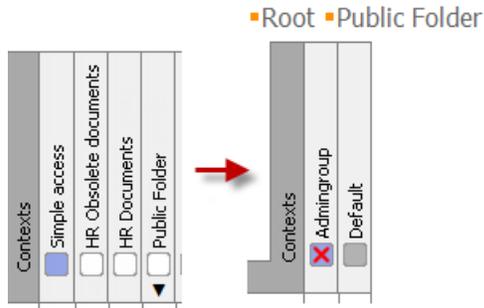
- Organize configuration elements and contexts by assigning them to applications. You can designate a user group for an application and assign a set of permissions separate from the Security configuration component. [Configuring Application Filters and Permissions, page 16](#) contains further instructions on configuring applications.

The list box on the configuration matrix menu bar allows you to filter the configuration matrix by application.

- Expand and collapse configuration components to show or hide the configuration elements. In the following example, clicking **Expand** next to Auto naming opens the list of Auto naming configuration elements.



- Organize contexts in a tree by designating parent contexts, then expand and collapse contexts to show or hide the child contexts. In the following example, clicking the arrow next to Public Folder opens the Public Folder configuration matrix.



The following table describes the icons next to contexts:

Icon	Description
<input checked="" type="checkbox"/>	A set with a type and user group definition
<input type="checkbox"/>	A set with one or several type(s)
<input checked="" type="checkbox"/>	A set with one or several user group(s)
<input checked="" type="checkbox"/>	A set with a type not marked (in use)
<input checked="" type="checkbox"/>	A set with a type not marked (in use) in the selected application
<input checked="" type="checkbox"/>	A set with a user group not marked (in use)
<input checked="" type="checkbox"/>	A set with a user group not marked (in use) in the selected application
<input checked="" type="checkbox"/>	A set with a type and user group not marked (in use)

## Configuring Contexts

1. Navigate to **Go to > Context** from the menu bar.
2. Click **New** to create a context.

If you want to create a child context that inherits the properties of an existing context, select a context and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this context applies. For example, adding the QA application causes the context to only apply to matching quality assurance cases.

Field	Description
Parents	Add or remove parent contexts for this context to correspond to a context tree.
Type	Add or remove content types.
Condition	Type the DQL-query filter.
Group	Add or remove user groups. The field conjoins groups using the OR statement.

4. Click **Save**.

## Configuring Application Filters and Permissions

1. Navigate to **Tools > Application** from the menu bar.
2. Click **New** to create an application.

If you want to create a child application that inherits the properties of an existing application, select an application configuration and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name.
Description	Type a description.
User/Group names	Use the list controls to add and remove users and groups.
Permissions	Use the list controls to add and remove permissions.  If more than one application is applicable to content, end users can only perform actions shared across all applications. For example, Application A grants the permission <b>Can drag and drop context</b> , while Application B grants the permissions <b>Can drag and drop context</b> and <b>Can create, modify, and delete content</b> . The end user can only drag and drop content because both applications grant the permission.

4. Click **Save**.

## Understanding Parent and Child Configurations

You can create a configuration that inherits the settings of and creates a parent-child relation with an existing configuration. When you import a configuration update, you can set D2 to check for changes made to the parent configuration. D2 then generates a PDF document listing the configuration components that were changed and its child configurations. D2 does not automatically apply the

changes to child configurations because you may not want to change one or more of the child configurations.

If you delete a parent configuration, the child configurations continue to show the deleted configuration as a parent.

[Importing a D2 Configuration, page 101](#) contains instructions for importing a configuration.



# Defining Repository Terminology

This chapter contains the following topics:

- **Defining Terminology Using Dictionaries**
- **Defining Terminology Using Taxonomies**
- **Configuring a Dictionary**
- **Importing a Large Dictionary**
- **Configuring a Taxonomy**
- **Storing a Registered Table**

## Defining Terminology Using Dictionaries

Use dictionaries to help end users by defining choice sets for property values, generating autonaming patterns, and providing input assistance during advanced searches. The choice sets ensure that uniform terminology is used across the context. As a result, you can:

- Increase the likelihood of a property being filled out by an end user.
- Reduce labeling errors such as extraneous spaces, inconsistent plurality, and so on.

You can define values for a dictionary, then apply a language, an alias, or both to each value. Use languages to specify a different value based on the language used by the end user. For example, you can have the value One in English but assign the value Ichi in Japanese. When an end user using an English interface opens a property page with a list box of numbers, they see one of the options is One. An end user using a Japanese interface opens the same property page with the same list box and sees the option Ichi. The value stored in D2 is treated as an equivalent due to the dictionary.

You can use an alias to create an alternate equivalent of the value. For example, you can have the value Draft, and assign as aliases the values Rough Draft, First Draft, and In Progress. In configuration components such as property page fields, you can designate the dictionary and alias used. You can use the different terms to assist end users. For example, in some cases when an end user accesses a list box, they see the option Rough Draft. You can use aliases so that in other cases, the end user sees the option In Progress. Despite the difference, both terms are treated as equivalent values and receive equivalent treatment from automatic processes.

The following screenshot shows an example dictionary:  
EMC Documentum

	Key	French	English
<input checked="" type="checkbox"/>	change_request	Demande de modification	Change request
<input checked="" type="checkbox"/>	directive1	Directive	Form
<input checked="" type="checkbox"/>	instruction1	Instruction	Instruction
<input checked="" type="checkbox"/>	procedure1	Procédure	Procedure
<input checked="" type="checkbox"/>			

You can use two types of dictionaries:

- Static values such as the category of a document, which is a fixed property.
- Dynamic values such as an authors property that is accessed using a DQL query for existing users.

As dictionaries encourage uniform terminology, D2 can then enforce automatic content linking rules with more confidence. Dictionaries as a whole improve content management from both a manual and automatic perspective. Dictionaries are used in the following configuration components:

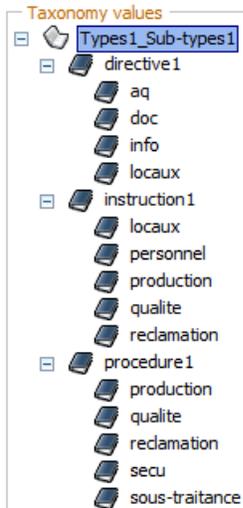
- Property pages for combo lists, labels, and so on.
- Creation profile for type and attribute selection.
- Autonaming for alias or languages in naming content.
- Autolinking for using properties labels for content placement.
- Search mapping for input assistance during advanced searches.
- Column mapping for use of labels and languages.

## Defining Terminology Using Taxonomies

Use a taxonomy if you want to filter values or design a tree of values. You can select dictionaries used in a taxonomy, then select which values to use and at what level of a hierarchy. D2 uses taxonomies in the property page to allow you to show the values available for series of attributes. Like dictionaries, taxonomies help end users by defining choice sets for property values, generating autonaming patterns, and providing input assistance during advanced searches. The choices sets ensure that uniform terminology is used across the context. As a result, you can:

- Increase the likelihood of a property being filled out by an end user.
- Reduce labeling errors caused cases such as extraneous spaces, inconsistent plurality, and so on.

For example, you can define a level of types, then define subtypes for each type, as shown in the following screenshot:



## Configuring a Dictionary

1. Navigate to **Data > Dictionary** from the menu bar.
2. Select one of the options for creating a dictionary.

If you want to create a child dictionary that inherits the properties of an existing dictionary, select a dictionary and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

Click **Restore dictionary** to open a specific version of an existing dictionary.

Click **Import** to import a table as a dictionary.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this dictionary applies. For example, adding the QA application would cause the dictionary to only apply to matching quality assurance cases.
Versioned dictionary	Select to use automatic version control for each save operation.
Groups > Administration group	Select a user group to have the ability to administer the dictionary using D2 Client.
Groups > Search Dictionary available for the group	Select a user group to have the ability to search the dictionary.
Labels > Label <language>	Type a label to appear in the configuration matrix and during content creation in D2 Client.

Field	Description
Manual sort	Select to enable ordering of dictionary values.
Create a registered table	Select to create an external table based on the values contained within the dictionary. D2 creates the table when you save the changes.

4. Select **DQL dictionary** to enable DQL dictionary creation.
  - a. Select **Dictionary caching** to enable dictionary updates only when you restart the web application server or when you refresh the cache. Selecting the option increases performance. To use this option, add the Dictionary caching URL to the **Clients URL** field in the D2 Options.
  - b. Type in to **DQL query** the DQL query. The following table describes commands you can use:

Command	Description
as name	Sets the preceding attribute as a key attribute.
as is_enabled	Enable or disable boolean properties.
as mon_alias	Create a new matching list for the key. The command is similar to the alias column.
as label_en/fr	Translate values
\$value()	Insert into the WHERE statement to refine results

5. Add dictionary values.
 

If **Manual sort** was selected, use the up and down arrows to reorder values.

You cannot delete dictionary values used in a creation profile and property page. Unselect **Key** to remove it from the dictionary.
6. Add or remove **Languages** values.
7. Add or remove **Alias** values.
8. To save the dictionary:
  - Click **Save** to use automatic versioning.
  - Click **Save dictionary** to manually version the dictionary.
  - Click **Export** to export the dictionary in a file format you want.
9. Click **Update repository** to load the changes in the repository without restarting the server.

## Importing a Large Dictionary

Use the `D2JobImportDictionary` job to import large dictionaries, because you may encounter performance problems when using D2 Client or D2 Config to import large dictionaries.

1. Create an index for the Oracle table `d2_dictionary_value` using the following command:

```
EXECUTE make_index WITH type_name='d2_dictionary_value',
attribute='dictionary_name', attribute='object_name'
```

2. Import the dictionary using the following command:

```
EXECUTE do_method WITH method = 'D2ImportDictionaryMethod',
arguments = '-overwrite true -folder <path to the dictionary>
-sorted false -transaction false'
```

## Configuring a Taxonomy

1. Navigate to **Data > Taxonomy** from the menu bar.
2. Select one of the options for creating a taxonomy.

If you want to create a child taxonomy that inherits the properties of an existing taxonomy, select a taxonomy and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

Click **Restore taxonomy** to open a specific version of an existing taxonomy.

Click **Import** to import a table as a taxonomy.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Administration group	Select a user group to have administration rights.
Description	Type a description.
Versioned taxonomy	Select to enable automatic version control of the taxonomy.

4. Add or remove dictionaries used in the taxonomy. You can only remove the lowest level on the list.
5. Use the list controls to add or remove taxonomy values.
6. To save the taxonomy:
  - Click **Save** to use automatic versioning.
  - Click **Save taxonomy** to manually version the taxonomy.
  - Click **Export** to export the taxonomy in a file format you want.

## Storing a Registered Table

Registered tables are relational database management system tables that are not part of the repository but are known to the Content Server. The *Documentum Content Server DQL Reference* contains further information about creating and querying registered tables. You can use registered tables as read-only dictionaries. You can import:

- Exported dictionaries.
- Imported .csv or .xsl files. This option can be used only on an existing registered table to edit its values.

Use registered tables as a reference.

1. Navigate to **Data > Registered table** from the menu bar.
2. Select one of the options for showing or editing a registered table. **New** does not create a registered table, you must create registered tables in Documentum Administrator or through a dictionary.

If you want to create a child registered table that inherits the properties of an existing registered table, select a registered table and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Select a registered table in the repository.
Description	Type a description.
Applications	Add or remove the applications to which this registered table applies. For example, adding the QA application would cause the registered table to only apply to matching quality assurance cases.
Administration group	Select a user group to have administration rights.

4. Add or remove table values.

Add a row by typing values into the empty row at the bottom of the table.

5. To save the registered table:

- Click **Save** to save the registered table.
- Click **Export** to export the registered table in a file format you want.

# Configuring Content Creation Components

This chapter contains the following topics:

- **Determining Which Creation Processes to Use**
- **Configuring Autonaming**
- **Configuring a Property Page**
- **Configuring Value Assistance Fields**
- **Configuring Property Conditions**
- **Configuring Inheritance**
- **Configuring Security**
- **Understanding Minimum Security Rights**
- **Editing a Security Model**
- **Configuring Security Inheritance**
- **Configuring Auto Link**
- **Configuring Template Lists**
- **Setting Up Thumbnails for Template List Previews**
- **Configuring Virtual Document Templates**
- **Configuring Linked Documents for Creating or Importing Content**
- **Configuring Checkin**
- **Configuring Checkout**
- **Configuring Uniqueness Check**
- **Configuring Mass Update**

## Determining Which Creation Processes to Use

You can configure context-dependent automated processes, which are performed when an end user creates content. Use the following table to determine which processes you want performed:

Process	Description	Example
<p>Auto naming</p> <p><a href="#">Configuring Autonaming, page 28</a> contains further instructions.</p>	<p>You can configure an automatic process to change property values.</p>	<p>An end user creates a quality assurance Draft document. An auto naming process can be run to rename the file to include quality assurance (QA) and Draft, such as QA_project_draft_7-30-2014.docx.</p>
<p>Property pages</p> <p><a href="#">Configuring a Property Page, page 30</a> contains further instructions.</p>	<p>You can create and configure property pages to determine the properties that end users can view and edit.</p> <p>If you do not specify a properties page in a creation profile, the D2 Client content creation wizard skips the properties step.</p> <p>If you delete properties from content types using other Documentum applications, such as Documentum Administrator, D2 shows the property pages with blank spaces. You must manually update the property pages to remove the deleted properties.</p>	<p>An end user creates a quality assurance Draft document. You can configure a property page to show a comment field and a checkbox for whether it is a private or public draft. This allows end users to view and add comments to the document and set its privacy status. End users cannot view or make changes to all other properties such as the document title, author, and status.</p>
<p>Inheritance</p> <p><a href="#">Configuring Inheritance, page 39</a> contains further instructions.</p>	<p>You can configure an automatic process to copy properties from existing content to new content.</p>	<p>An end user creates a Project 122 documentation that inherits properties from Project 120 documentation. Keywords such as Project 12X are copied from the 120 documentation to the 122 documentation, alleviating the need to manually copy properties.</p>
<p>Security</p> <p><a href="#">Configuring Security, page 40</a> contains further instructions.</p>	<p>You can configure security models, which define dynamic access control lists (ACLs) that apply to contexts. You can specify a condition based on three identifiers to apply a level of permissions. The three types of identifiers are specific users, user groups, and content properties. If multiple conditions match a specific situation, the most extensive set of rights is applied.</p> <p>If no security model is selected, D2 applies the default ACL configured depending on the Documentum repository configuration.</p>	<p>An end user can belong to the quality assurance Draft Writers group, which gives them WRITE permission within the quality assurance documentation folder.</p>

Process	Description	Example
<p>Auto linking</p> <p><a href="#">Configuring Autolink, page 43</a> contains further instructions.</p>	<p>You can configure an automatic process to place content in specified locations within the repository. You can configure an auto link template to have multiple placements, in which case the content is placed in the first, then linked to the other placements.</p> <p>Changing the property values of content and affecting its context can cause a change in the placement of the current version of the content.</p> <p>If no auto link rule is configured, D2 adds content to the selected folder. If no folder is selected, D2 adds content to the cabinet level.</p> <p>Folders with a high volume (roughly 500) of content can have performance issues and errors. Configure auto linking of content to minimize the amount of content within each folder. For example, a project may contain 500 documents, leading to performance degradation. To work around the issue, you can configure an auto link to create and fill subfolders for project phases to reduce the number of content directly found in the project folder.</p>	<p>An end user creates a quality assurance Draft document. The document is placed in the quality assurance Draft folder with all other quality assurance drafts. If the end user sets the document to Private, in which it is hidden from other users, auto link can move the document to a personal, locked folder in the quality assurance Draft folder. When the end user decides to set the document back to Public, auto link can move the document back to the quality assurance Draft folder.</p>
<p>Template list</p> <p><a href="#">Configuring Template Lists, page 46</a> contains further instructions.</p>	<p>You can configure a list of content templates suggested to an end user during the end of the content creation process. Assign lists of templates to contexts, which allows you to provide templates that are only relevant to specific circumstances.</p> <p>End users can be part of the administration group for template lists. This enables configuration of template lists directly through D2 Client.</p> <p>If there is only one template that an end user can select and the end user does not have template creation privileges, the D2 Client content</p>	<p>You can bundle a set of templates for all quality assurance documentation, such as drafts, presentations, and reports. When an end user creates content using the quality assurance application, they can select from a list of quality assurance-specific templates.</p>

Process	Description	Example
	creation wizard selects the template and skips the template step.	
<p>VD Template</p> <p><a href="#">Configuring Virtual Document Templates, page 47</a></p>	You can configure a virtual document template for inheritance of properties and components. End users can use virtual document templates to insert components of a selected virtual document into a virtual document or create a copy of the template virtual document.	An end user creates a presentation content and selects a virtual document template to inherit. The presentation gains the virtual document children applied to the template.
<p>Linked document</p> <p><a href="#">Configuring Document Linking, page 48</a> contains further instructions for configuring linked documents for new and imported content.</p> <p><a href="#">Configuring Linked Documents for Importing Emails, page 57</a> contains further instructions for importing attachments as linked documents.</p>	You can configure the content creation process to create additional documents during content creation and link them to the base content. This enables end users to create batches of documents that are controlled by a central document.	An end user can create a business plan, then link notes, presentation slides, and so on to the business plan.
<p>Checkin</p> <p><a href="#">Configuring Checkin, page 49</a> contains further instructions.</p>	You can configure aspects of checkin such as versioning and logging.	<p>An end user checks in a quality assurance Draft. Checkin configurations result in no versioning.</p> <p>If an end user checks in a quality assurance In-Review document, checkin configurations can result in minor versioning.</p>
<p>Checkout</p> <p><a href="#">Configuring Checkout, page 50</a> contains further instructions.</p>	You can configure aspects of checkout such as warning messages and checkout range.	<p>An end user checks out an approved document. Checkout configuration causes a warning message reminding the end user the document has already been approved.</p> <p>If the end user checks out a draft document, checkout configuration can differ, such as showing no warning message.</p>

## Configuring Autonaming

1. Navigate to **Go to > Auto naming** from the menu bar.
2. Click **New** to create an autonaming rule.

If you want to create a child autonaming rule that inherits the properties of an existing autonaming rule, select an autonaming rule and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this autonaming rule applies. For example, adding the QA application would cause the autonaming rule to only apply to matching quality assurance cases.
Generate the document name for each property modification	Select to have the document name updated whenever a save operation is performed on properties used by the autonaming rule.  For example, if an autonaming rule uses the <code>a_status</code> property of the content, and the content passes through a workflow or lifecycle that alters <code>a_status</code> , selecting the checkbox would cause the property controlled by the autonaming rule to change.
Regenerate on new version	Select to have the document name updated whenever a new version of the content is created.
Property name	Select the property changed.

4. To add a property to the **Auto naming template**:
- Select a property from the **Properties** list box in the **Naming** menu bar.
  - Select a dictionary if the property uses a dictionary. Select a language or alias.
  - Type the index position of the value if the property is a repeating property and you want to select a specific value.  
  
For example, if you want to select the first value of the list, type 0.
  - Type the date format if the property is a date property, select a DQL action, and enter the value. Use the following table to understand what values to type for each DQL action:

DQL Action	Value
DATEADD	year   month   week   day followed by an integer value
DATEFLOOR	year   month   week   day

- Select the position in the autonaming template, then type text to insert static text.
- To configure the counter:
  - Type the initial counter value in **Counter value**.
  - Select **Counter depends on template properties** to count subtype changes. When not selected, changes to content subtype do not increase the counter.
  - Fill the form as follows:

Field	Description
Send email notification to	Type the email address to which D2 sends a notification.
when the number of remaining values is	Type a counter value. When the entered number of values remains, D2 sends a notification to the previously entered email address alerting the recipient.
Interval start value	Type the starting value.
Interval end value	Type the end value.

- d. Click + to add another interval of counter values. When one interval ends, D2 continues the counter from the next sequential interval start value.
7. Click + to add a regular expression:
- a. Fill out the form as follows:

Field	Description
Name	Type the name of the regular expression.
Pattern	Type the statement to be replaced.
Replace	Type the replacement statement.

For example, having `underscore, _`, `-` respectively replaces all `_` with `-`.

- b. Use the up and down arrows to reorder the regular expressions. Regular expressions are executed from top to bottom.
8. Click **Save**.

## Configuring a Property Page

1. Navigate to **Go to > Property page** from the menu bar.
2. Click **New** to create a property page.

If you want to create a child property page that inherits the properties of an existing property page, select a property page and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this property page applies. For example, adding the QA application causes the property page to only apply to matching quality assurance cases.
Document type	Select the document type.
Focused control	Select the property object that has focus when the property page is opened.

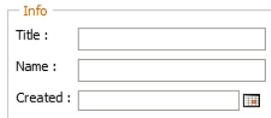
Field	Description
Width	Enter the width in pixels.
Height	Enter the minimum height of the property page in pixels.  If the property page widget in D2 Client does not scroll down far enough to show all property page content, increase the height of the property page.
Resizable	Select if you want the property page to be resizable.
Buttons	Select the position of the <b>OK</b> and <b>Cancel</b> buttons.

4. Configure electronic signature options as described in the following table:

Field	Description
Electronic signature required (in edition mode)	Select to require an electronic signature to save properties.
Intention required	Select to require the reason with the electronic signature.
Intentions dictionary	Select a dictionary to enable users to select a reason from a list of options.

5. Add organizational objects to the property page.

a. Use the following table to determine which organizational objects to add:

Icon	Name	Description
	Tab unit 	Creates an area to which you can add tabs.
	Tab	Creates a tab in a tab unit.  Type a label for the field.
	Field set 	Creates a fieldset to cluster property objects together.  Type a label for the field and select whether to use a border.
	Grid 	Creates a table using properties as columns. DQL using dependencies on values of other columns and taxonomies configured inside the Grid do not function.  Type a height for each grid in pixels. All controls added to the grid can be toggled to have <b>No empty cell</b> . When the checkbox is selected, the field must be populated before the properties can be saved.
	Column set Category : <input type="checkbox"/> Effective Label : <input type="checkbox"/> Hidden : <input checked="" type="checkbox"/> Template : <input checked="" type="checkbox"/>	Organizes property objects by a configured number of columns.  Type the number of columns in the set and add objects. The property page automatically organizes objects in columns.

Icon	Name	Description
	Comment	<p>Adds a static comment with font styles.</p> <p>Type a label for the field. You can use HTML in the label by selecting the option, or you can use the \$value and \$alias keywords.</p> <p>Select font color, size, and style.</p>
	Empty cell	Adds an empty cell. Use empty cells in grids and column sets to organize property placement.
	Separator	Adds a horizontal bar. Use separators to add a visual marker for different sections of the property page.

- b. Configure property conditions. [Configuring Property Conditions, page 37](#) contains further instructions.
6. Add property objects.

You can preview the property page by clicking the **Display preview in create mode**, **Display preview in edit mode**, and **Display preview in import mode** buttons. The buttons show a dialog box with the selected property page form, allowing you to check your work. Permissions configured for each property are active for the preview. If you do not belong to the correct groups, certain properties may not appear when previewing properties.

- a. Use the following table to determine which property objects to add:

Icon	Name	Description
	Label	<p>Adds as static text the property name, a colon, and the value of the property.</p> <p>Select a property. Type a label if you do not want to use the label that was defined for the property using Documentum Application Builder.</p> <p>For example, if you select the property <code>date_finish</code> and type the label <code>Finishing Date</code>, the property page shows <b>Finishing Date : 8/9/2017</b></p> <p>If you type the label <code>Finish date</code> the property page instead shows <b>Finish date : 8/9/2017</b></p>
	Text	<p>Adds a text field for end users to type values into and save.</p> <p>Select the property for storing the value and type a label if you do not want to use the label that was defined for the property using Documentum Application Builder.</p>
	Password	<p>Adds a text field for end users to type a password into for saving. D2 displays the password during auditing and when producing info dumps, so make sure end users account for the risk of password exposure.</p> <p>Type a label if you do not want to use the label that was defined for the property using Documentum Application Builder.</p>

Icon	Name	Description
	Memo	<p>Adds a text box for end users to type a memo into and save.</p> <p>Type a label if you do not want to use the label that was defined for the property using Documentum Application Builder and the row height of the field.</p>
	Rich text editor	<p>Adds a rich text editor for users to format the content or value of a property.</p> <p>Type a label if you do not want to use the label that was defined for the property using Documentum Application Builder.</p>
	Boolean	<p>Adds a checkbox that returns a boolean value.</p> <p>Type a label if you do not want to use the label defined for the property in Documentum Application Builder.</p>
	Date	<p>Adds a date field for end users to select a date from a calendar. D2 uses the server date and time to registered the selected date and can show an error when you click <b>Save</b> if the dates do not match due to timezone differences.</p> <p>Type a label if you do not want to use the label that was defined for the property using Documentum Application Builder.</p>
	URL hyperlink	<p>Adds a list field for end users to add, remove, reorder, and access external links.</p> <p>Type a label if you do not want to use the label that was defined for the property using Documentum Application Builder and select which action you want users to perform to open the URL.</p>
	Combo field	<p>Adds a list for end users to select values from a DQL query, a dictionary, or a taxonomy.</p> <p>Type a label if you do not want to use the label that was defined for the property using Documentum Application Builder and select <b>Load asynchronously</b> to load values on click and filter as opposed to when the dialog box is opened. Use the option when the list contains a large number of values.</p>
	Editable combo field	<p>Adds a list for end users to select values from a DQL query, a dictionary, or type. End users can type text in the field to filter the list of values.</p> <p>Type a label if you do not want to use the label that was defined for the property using Documentum Application Builder and select <b>Load asynchronously</b> to load values on click and filter as opposed to when the dialog box is opened. Use the option when the list contains a large number of values. You can also type a width and height for the popup dialog box shown to the end user.</p>

Icon	Name	Description
	List field	<p>Adds a list for end users to select several values from a DQL query or a dictionary. The selected values must have the <b>Repeating</b> property.</p> <p>Type a label if you do not want to use the label that was defined for the property using Documentum Application Builder, select the row height for the field, select whether to sort the list in alphabetical order, select whether to enable import and export of the list of values from and to XLS documents, and type the height and width of the selection dialog box.</p> <p>Select <b>Load asynchronously</b> to load values on click and filter as opposed to when the dialog box is opened. Use the option when the list contains a large number of values.</p> <p>Select <b>Load on selection popup opening</b> to load values when the selection dialog box is opened. If not selected, users must press ENTER to load the list.</p>
	Editable list field	<p>Adds a list for end users to select several values from a DQL query or a dictionary, or add text. The selected values must have the <b>Repeating</b> property.</p> <p>Type a label if you do not want to use the label that was defined for the property using Documentum Application Builder, select the row height for the field, select whether to sort the list in alphabetical order, select whether to enable import and export of the list of values from and to XLS documents, and type the height and width of the selection dialog box.</p> <p>Select <b>Load asynchronously</b> to load values on click and filter as opposed to when the dialog box is opened. Use the option when the list contains a large number of values.</p> <p>Select <b>Load on selection popup opening</b> to load values when the selection dialog box is opened. If not selected, users must press ENTER to load the list.</p>
	Radio	<p>Adds a list for end users to select a single value with a single click.</p> <p>Type a label if you do not want to use the label that was defined for the property using Documentum Application Builder and select whether to list the options vertically instead of horizontally.</p>
	Checkbox	<p>Adds a list for end users to select a multiple values. The selected values must have the <b>Repeating</b> property.</p> <p>Type a label if you do not want to use the label that was defined for the property using Documentum Application Builder and select whether to list the options vertically instead of horizontally.</p>

Icon	Name	Description
	Controlled relation	<p>Adds a controlled relation field for users to add related documents for that relationship type.</p> <p>Select a configured relationship type from the <b>Relation</b> type list box.</p> <p>Do not use the D2_COPY_OF relationship type because it is an internal relation used for inheritance. When creating or importing content, D2 does not create a relationship for the D2_COPY_OF relationship type and does not show the relation in the property page.</p>
	PDF preview	<p>(For D2 Client 3.1 only) Adds a preview of the content to the property page.</p> <p>Type a label if you do not want to use the label that was defined for the property using Documentum Application Builder and the height of the preview box.</p>
	Button	<p>(For D2 Client 3.1 only) Adds and enables the ability to configure buttons.</p> <p>By default, the button executes a Save operation. You can configure the buttons to execute a Javascript action.</p> <p>Type the:</p> <ul style="list-style-type: none"> <li>• Label if you do not want to use the label that was defined for the property using Documentum Application Builder</li> <li>• Width.</li> <li>• Javascript action to execute.</li> </ul> <p>You can configure buttons to appear on the left or right of the property page. Otherwise, they appear on the bottom.</p> <p><a href="#">List of Custom Actions, page 177</a> contains further information on the commands you can use.</p>

- b. To fill the field with a value, select a **Type** and fill out the subsequent fields. You can select a type for labels, radio buttons, checkboxes, combo fields, and list fields.

The following table describes keywords that you can use if you select **DQL**:

Keyword	Description
as name	Save the value as the <b>Name</b> .
as label	Save and use the value as the <b>Label</b> .
<code>\$value (property name)</code>	Use the value of the property <i>property name</i> .

If you load asynchronously, a DQL query for loading values must include `$value (filter)`

For example, `select user_name as name, user_name as label from dm_user where $value(filter) order by 1`

Ensure that you use specific queries such as the above example. D2 may not be able to process large sets of results returned by queries that are too general, such as `select * from`.

- c. To save the value of the field to a property, select a **Property**. If you do not want to save the value to a property, select **Do not link to property** and type an ID for the field in **Control id**. Use the control ID to create value assistance fields. [Configuring Value Assistance Fields, page 36](#) contains further instructions on linking fields to create dynamic forms.
  - d. [Configuring Property Conditions, page 37](#) contains instructions on configuring conditions in which a property applies.
  - e. When applicable, use < and > to configure reinitialization of properties when content is modified.
7. Click **Save**.

## Configuring Value Assistance Fields

You can set fields in property pages to act as assistance for filling out other fields.

For example, you can have a **State** list field and a **Facility** list field. With this example, an end user can select a state, which populates the **Facility** field with a list of facilities specific to the selected state. This helps an end user to find a facility within a state.

1. To use DQL assistance:
  - a. Set the **Type** of the property object receiving assistance to **DQL**.
  - b. Type a filtering query using \$value(<the control ID of the assisting object>)

For example, during configuration of the **State** field, you can enter `selected_state` as the **Control id**. During configuration of the **Facility** field, select **DQL** as the **Type**, then type as the query `select * from facilities where state=$value(selected_state)`

The following table shows a summary of the fields:

Assisting property object (State)	Assisted property object (Facility)
Control id: <code>selected_state</code>	Type: <b>DQL</b>
	DQL Query: <code>select * from facilities where state=\$value(selected_state)</code>

If the user selects **Maryland** in the **State** field, the DQL query is run. The DQL query filters all facilities with the state value matching **Maryland** and populates the **Facility** field with a selectable list.

Append `enable (return_top <maximum number of results>)` to limit the result set of the query to the indicated value. Use this parameter to avoid performance problems associated with large result sets.

2. To use Taxonomy assistance:
  - a. In the property object being used as assistance, select **Taxonomy**, fill out the respective fields, then select the level of the taxonomy to be used in the assisted field in **Next Property**.
  - b. In the property object receiving assistance, select **Taxonomy** and select the **Level** to match the **Next Property** field selected previously.

This example uses the taxonomy **Facilities by state**, which has the hierarchy of **Country** > **State** > **Facility**.

During configuration of the **State** field, select **Taxonomy**, select the taxonomy **Facilities by state**, select the level **State**, and select in **Next Property** the subtype **Facilities**. During configuration of the **Facility** field, select the taxonomy **Facilities by state** and select the level **Facilities**.

The following table shows a summary of the fields:

Assisting property object (State)	Assisted property object (Facility)
Type: <b>Taxonomy</b>	Type: <b>Taxonomy</b>
Taxonomy: <b>Facilities by state</b>	Taxonomy: <b>Facilities by state</b>
Level: <b>State</b>	Level: <b>Facilities</b>
Next Property: <b>Facilities</b>	

If the user selects **Maryland** in the **State** field, the **Facility** field is populated by the subtypes of **Maryland** in the taxonomy.

## Configuring Property Conditions

You can configure the display, activation, and requirements for every property object added to a property page, as described in the following table:

Tab name	What the conditions are for
Enabled condition	Conditions configured in this tab determine whether the property object can be edited.
Visibility condition	Conditions configured in this tab determine whether the property object can be viewed.
Required condition	Conditions configured in this tab determine whether the property object is a required property. Not all objects contain a required condition tab.
Validation constraint	<p>The regular expression configured in this tab forces a validation to be performed on a text field, password field, or date fields. This tab does not appear for other property objects.</p> <p>Validation is performed:</p> <ul style="list-style-type: none"> <li>• When validating the dialog during creation.</li> <li>• While leaving each field during editing.</li> </ul>

There are two editors for property conditions:

- Simple view editor: This editor provides a user interface for inputting conditions.
- Advanced view editor: This editor provides a text field for typing a DQL query as the condition. This editor is only available in D2 Client 3.1.

**Note:** Using DQL statement with parenthesis in the Required condition in the Advanced view editor is not honored in a properties dialog used within a query form. For a query form, design the condition without parenthesis and define from left to right in a specific order to allow the query to meet the condition.

1. On the **Enabled condition** tab:

- a. Use the list controls to add and remove conditions. If you do not set conditions, D2 considers conditions to have been met.

If you are using the simple view editor, select a condition attribute and operator and type the condition value. For example, you can have the condition attribute `object_name`, the operator `contains`, and the value `QA`. The property then requires the content to have QA in the file name.

If you are using the advanced view editor type your condition.

- b. Fill out the form as described in the following table:

Field	Description
Enabled only for group	Select the content subtype for which the property is enabled.
Reinitialize when this control is disabled	Select to reset the attribute value when the content is deactivated.
Creation mode	Select to use this property element when content is being created.
Edit mode	Select to use this property element when the properties page of content is being edited.
Import mode	Select to use this property element when content is being imported.

2. On the **Visibility condition** tab:

- a. Use the list controls to add and remove conditions. If you do not set conditions, D2 considers conditions to have been met.

If you are using the simple view editor, select a condition attribute and operator and type the condition value. For example, you can have the condition attribute `object_name`, the operator `contains`, and the value `QA`. The property then requires the content to have QA in the file name.

If you are using the advanced view editor type your condition.

- b. Fill out the form as described in the following table:

Field	Description
Visible only for group	Select the content subtype for which the property is shown.
Reinitialize when this control is disabled	Select to reset the attribute value when the content is deactivated.
Reserved space	Select to keep the space allotted for the property element even if the element is set to invisible.
Creation mode	Select to use this property element when content is being created.
Edit mode	Select to use this property element when the properties page of content is being edited.
Import mode	Select to use this property element when content is being imported.

3. On the **Required condition** tab:

- a. Use the list controls to add and remove conditions. If you do not set conditions, D2 considers conditions to have been met.

If you are using the simple view editor, select a condition attribute and operator and type the condition value. For example, you can have the condition attribute `object_name`, the operator `contains`, and the value `QA`. The property then requires the content to have `QA` in the file name.

If you are using the advanced view editor type your condition.

- b. Fill out the form as described in the following table:

Field	Description
Required only for group	Select the group for which filling out this property element is required.
Creation mode	Select to use this property element when content is being created.
Edit mode	Select to use this property element when the properties page of content is being edited.
Import mode	Select to use this property element when content is being imported.

4. On the **Validation constraint tab**, set a validation constraint:

- a. Configure the regular expression:

- Text and password property validation accepts Javascript regular expressions.
- Date validation accepts two types of constraints (`equals`, `notEquals`, `Greater`, `Lesser`, `LesserOREquals`, `GreaterOREquals`) when comparing to other date fields, or `$TODAY` when comparing to the current date. The other field must be available in the dialog box.

- b. Type a **Message** to show when validation fails. This message is appended to the default message:

`'attr' is invalid.`

5. Click **Save**.

## Configuring Inheritance

1. Navigate to **Go to > Inheritance** from the menu bar.
2. Click **New** to create an inheritance rule.

If you want to create a child inheritance rule that inherits the properties of an existing inheritance rule, select an inheritance rule and click **Create from**. [Understanding Parent and Child Configurations](#), page 16 contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.

Field	Description
Description	Type a description.
Applications	Add or remove the applications to which this inheritance rule applies. For example, adding the QA application would cause the inheritance rule to only apply to matching quality assurance cases.

4. Use the list controls to add and remove inherited properties.
5. Select the relation type used during inheritance. The following table describes the differences:

Relation type	Description
Default	Use the COPY_OF relation.
None	No relation used.
Other relation	Select a defined relation type from the list box.

6. If you want to prevent inheritance of Virtual Document structure:
  - a. Type the inheritance prevention condition for each Virtual Document component in **Testing condition on each component**.
  - b. Type a warning message in **Warning message**. The message is shown in D2 Client when inheritance is performed.
7. Click **Save**.

## Configuring Security

1. Navigate to **Go to > Security** from the menu bar.
2. Click **New** to create a security model.

If you want to create a child security model that inherits the properties of an existing security model, select a security model and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix. <a href="#">Configuring Security Inheritance, page 43</a> contains more information on using the Name field to configure security inheritance.
Description	Type a description.
Applications	Add or remove the applications to which this security model applies. For example, adding the QA application would cause the security model to only apply to matching quality assurance cases.

4. Configure levels of permissions:
  - a. Use list controls to add, remove, and reorder permission levels.
  - b. For each level, select an **Identifier** from one of the three list boxes:

- User
- Group
- Property

You can merge text and property context using the following keywords:

Keyword	Description
<code>\$dqlvalue (' &lt;dql request&gt;')</code>	Perform a DQL request. You must include the quotation marks.
<code>\$value (&lt;property&gt;) \$value (&lt;property&gt;)</code>	Merge two properties, for example <code>\$value (country) \$value (state)</code>

- c. Use list controls to add, remove, and reorder conditions. You cannot remove the default condition.

Conditions relate a property list box to an expression. D2 prioritizes the matching of the conditions from top to bottom.

- d. Toggle permissions by double-clicking on the cells as described in the following table:

Right	Description
Change State	Users can change the state of content that has been applied a lifecycle.
Change Owner	Users can change the owner of content. If the user is not the content owner or a superuser, they must also have Write permission.
Change Permit	Users can change the basic permissions of content.
Delete Object	Users can only delete the object. Give this permission if you want to allow a user to delete without being able to read the content.
Change Folder Links	Users can create or remove links to a folder. Give this permission if you want to allow a user to move content into a folder without having permissions to read or write within the folder.
Change Location	Users can move content within the repository. The user must also have Write permission to move content and Browse permission to link content.
Execute Proc	Users can run external procedures stored in the repository as a <code>dm_procedure</code> on certain object types.
IRM Print	Users can print content through an IRM server. This permission is shown when D2 detects the installation of an IRM server.
IRM Copy	Users can copy content through an IRM server. This permission is shown when D2 detects the installation of an IRM server.

Right	Description
IRM Take Offline	Users can access a local copy of content when disconnected from the IRM server. You can configure in the IRM server the duration of offline access.  This permission is shown when D2 detects the installation of an IRM server.
IRM View Activity	Users can view the IRM activity log for content.  This permission is shown when D2 detects the installation of an IRM server.

5. Click **Save**.

## Understanding Minimum Security Rights

Users require at least a certain level of security rights to perform different content-related tasks. Use the following table to understand the minimum rights for users and superusers for creating, modifying, and copying content:

		Without folder security		With folder security	
		Superuser	User	Superuser	User
<b>Creation of content</b>	<b>Parent folder</b>	None	Browse	Write	Write
	<b>Object</b>	None	Browse	Write	Write
<b>Deletion</b>	<b>Parent folder</b>	None	Browse	Write	Write
	<b>Object</b>	Delete	Delete	Delete	Delete
<b>Move</b>	<b>Parent folder</b>	None	Browse	Write	Write
	<b>Destination folder</b>	None	Browse	Write	Write
	<b>Object</b>	Write	Write	Write	Write
<b>Duplicate</b>	<b>Parent folder</b>	None	Browse	Read	Read
	<b>Destination folder</b>	None	Browse	Write	Write
	<b>Object</b>	Read	Read	Read	Read

## Editing a Security Model

Changing an existing security model can affect newly created content as well as existing content that uses the model being changed.

1. To modify a security model and affect existing content, modify the security model and do not modify the configuration matrix.

D2 runs a job in the background to modify the ACL of all previously created content using the security model.

2. To modify a security model and avoid affecting existing content, unless you perform a manual operation:
  - a. Create a copy of the security model.
  - b. In the configuration matrix, unselect the previous security model and select the new security model.

D2 applies the security model to new content and to existing content when it is saved, checked in, or has a property changed.

3. To modify a security model and avoid affecting existing content:
  - a. Create a copy of the security model.
  - b. Create a copy of the content context used for the previous security model. Add the condition `r_creation_date > <the date of creation for the new security model>` to identify the content created for the new security model.
  - c. Drag the new context before the old context in the configuration matrix.
  - d. Activate the new context.

D2 applies the new model to all new content, and old content continues using the old security model. You can launch D2CoreJob using Documentum Administrator or run a mass update to apply the new security model to linked content.

## Configuring Security Inheritance

1. Create or configure a security model.
2. Type one of the following keywords corresponding to the set of ACLs you want inherited in the **Name** field:
  - FOLDER for the rights of the creation folder.
  - USER for the rights of the user.
  - TYPE for the rights of the document type.
3. Click **Save**.

## Configuring AutoLink

1. Navigate to **Go to > Auto link** from the menu bar.
2. Click **New** to create an auto linking template.

If you want to create a child auto linking template that inherits the properties of an existing auto linking template, select an auto linking template and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.

Field	Description
Applications	Add or remove the applications to which this auto linking template applies. For example, adding the QA application would cause the auto linking template to only apply to matching quality assurance cases.
Label for undefined property	Type a name for the folder to be created if a property is not filled.  For example, if you define the path <i>:/Property 1/Property 2/Property 3</i>  If <i>Property 1 = Apple</i> and <i>Property 2 = Berry</i> , but <i>Property 3</i> is not set with a value and you typed Orange in the <b>Label for undefined property</b> field, the auto link template places the content in <i>:/Apple/Berry/Orange</i>
No empty folder on the extremity	Select if you do not want to create a folder for a missing property value. For example, if you take the example from <b>Label for undefined property</b> , instead of placing the content in <i>:/Apple/Berry/Orange</i> the content is placed in <i>:/Apple/Berry</i>
Link all versions to current version folders	Select if you want all versions of the content to be moved to the new location in the repository.  If you do not select this checkbox, other versions are kept in their original locations.

4. Configure repeating properties:

Fields	Description
Link only the first value of the repeating properties	Select to link the first values of each repeating property together.
Link repeating properties between themselves	Select to link repeating attributes together.

The following table shows examples of the two checkboxes:

Property 1	Property 2	Property 3	No checked boxes	Link only the first value of the repeating properties	Link repeating properties between themselves
A, B	C, D	E (single)	/A/C/E /A/D/E /B/C/E /B/D/E	/A/C/E	/A/C/E /B/D/E
A, B	C, D	E (repeating)	/A/C/E /A/C/ Undefined /A/D/E	/A/C/E	/A/C/E /B/D/ Undefined

Property 1	Property 2	Property 3	No checked boxes	Link only the first value of the repeating properties	Link repeating properties between themselves
			/A/D/ Undefined  /B/C/E  /B/C/ Undefined  /B/D/E  /B/D/ Undefined		

5. Click **Add path** to add a path.
6. Click /+ to add a folder to a path.
7. Click the text field above the folder category to select and configure a folder property:
  - a. Select a property from the **Properties** list box.
  - b. Type a **Repeating Index** if the selected property is a repeating property.
  - c. If applicable to the selected property, select a dictionary from the **Dictionaries** list box, then select an alias or language.
  - d. Click the hand button to add the property.
  - e. You can type static text into the folder property.
  - f. To reorder properties, drag and drop properties.
8. Click the space between the / symbols and select a default value to associate with the content at different folder levels:
9. Click the space below the default values and select an ACL template for the security of the folder:
10. To set the cabinet to your personal folder, select **Home cabinet**.
11. Click + to add a regular expression.
  - a. Fill out the form as follows:

Field	Description
Name	Type the name of the regular expression.
Pattern	Type the statement to be replaced.
Replace	Type the replacement statement.

For example, having underscore, `_`, `-` respectively replaces all `_` with `-`.

- b. Use the up and down arrows to reorder the regular expressions. Regular expressions are executed from top to bottom.
12. Click **Save**.

**Note:** Auto Linking is performed only by the installation owner account. You cannot restrict this feature to a specific set of users or groups.

## Configuring Template Lists

1. Navigate to **Go to > Template** from the menu bar.
2. Click **New** to create a template list.

If you want to create a child template list that inherits the properties of an existing template list, select a template list and click **Create from**. [Understanding Parent and Child Configurations](#), page 16 contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this template list applies. For example, adding the QA application would cause the template list to only apply to matching quality assurance cases.
Administration group	Select a user group to have administration rights over the list in D2 Client (D2 Client 3.1 only).
Enable document without content	Select to allow documents with empty content bodies.

4. You can create a static, defined list of templates or a dynamic list of templates based on a DQL filter. To create a static list, select **List**.
  - a. Click **Browse** to show the **Templates** dialog box and use < and > to configure the list of template documents.

For each template, you can add a template display condition. Select the template, then type a DQL statement in **Selected template display condition**.

- b. Click **Import** to show the **Import** dialog box add a template to the repository, then fill out the form as described in the following table:

Field	Description
Name	You can change the name after importing the file. By default the name of the imported file name is used.
File	Click <b>Browse</b> , then locate and select the document to use as a template.  Do not select a blank document as a template.
Format	Select the file format.

Click **OK** to close the **Import** dialog box and import the template to the repository.

- c. When you have imported all templates you wish to add to the repository, click **OK** to close the **Templates** dialog box.
5. To create a dynamic list of templates, select **Query**, then type a DQL filter into **Qualification** to create a template list based on a DQL query of the templates in the repository.

For example, `mes_templates` where `a_status = 'Approved'` creates a list of templates that have been set to Approved. The produced list uses the `object_name` property as the template name.

6. Click **Save**.

## Setting Up Thumbnails for Template List Previews

If renditions generated using the ADTS are available for the template, D2 shows a preview of the template file. You can configure this by ensuring that template files have the correct .jpg rendition associated. To do so, you can:

- Configure the ADTS to automatically create thumbnail renditions for the D2 environment. In this case, you should see previews instead of file format icons.
- Request a thumbnail rendition from the rendition server. For example, the *Bulk-request of PDF rendition for existing documents in the docbase* article in EMC Solutions contains further information about configuring bulk-requests of PDF renditions.

When a thumbnail server is configured, D2 uses the .jpeg thumbnail files as described below:

- `jpeg_th`: Used in the Thumbnails widget when an end user sets the page modifier for the widget to `large_jpeg_th`.
- `jpeg_lres`: Used in the Preview widget.

## Configuring Virtual Document Templates

1. Navigate to **Go to > VD Templates** from the menu bar.
2. Click **New** to create a virtual document template.

If you want to create a child virtual document template that inherits the properties of an existing virtual document template, select a virtual document template and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Label <language>	Type a label.
Description	Type a description.
Applications	Add or remove the applications to which this virtual document template applies. For example, adding the QA application would cause the virtual document template to only apply to matching quality assurance cases.
Asynchronous build	Select to create the virtual document in asynchronous mode.

4. Click + to add an operation. D2 applies all applicable operations for each child of the VD:
  - a. To create a virtual document with copied root and components, select **Copy** as the **Operation**, then fill out the properties as described in the following table:

Field	Description
Qualification DQL	Type a single DQL query to filter the source components.  For example, <code>dm_document where a_status = 'Draft'</code>
New object type	Select the object type of the newly created component.
Inherit content	Select to inherit the content of the component.
Default values	Select a default values template.
Component inheritance	Select an inheritance template for the properties of the VD children.
Root inheritance	Select an inheritance template for the properties of the VD root.
Version label	Type the version label for the copied output.
Default lifecycle	Select a default lifecycle to set the starting status of the copied output.

- b. To link the source component to the new virtual document, select **Link** as the **Operation**, then fill out the properties as described in the following table:

Field	Description
Qualification DQL	Type a single DQL query to filter content.
Binding rule	Type the version number or version label of the content to link. The option allows you to force D2 to show a specific version in the new virtual document. If a matching version is not found, D2 shows the current version of the source component.

- c. To exclude the content in the VD, select **Exclude** as the **Operation**, then type a single DQL query to filter content. You can only exclude copy or link operations.

5. Click **Save**.

## Configuring Linked Documents for Creating or Importing Content

1. Navigate to **Go to > Linked document** from the menu bar.
2. Click **New** to create a document link.

If you want to create a child document link that inherits the properties of an existing document link, select a document link and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this document link applies. For example, adding the QA application would cause the document link to only apply to matching quality assurance cases.

4. Add a document link by clicking **Add linked document**.
5. For each row of the table:
  - a. Select the link type. The following table describes the three available types:

Type	Description
Relation	The document link is derived from a relation. Select a relation name and type.
VD and Relation	The document link is derived from a virtual document and a relation. Select a relation name and type.
VD	The document link is derived from a virtual document.

- b. Select the creation profile for the content being created.
- c. Type the message shown before creating the document.
- d. Select one of the following:
  - **Required** to require the end user to configure a linked document.
  - **Silent creation** to create the linked document as a background process.  
Always select a default value template when using silent creation to avoid property inheritance errors.

If you select **Required** or leave both options unselected, D2 Client shows end users the message typed in step 5c.

6. Click **Save**.

## Configuring Checkin

1. Navigate to **Go to > Checkin** from the menu bar.
2. Click **New** to create a checkin setting.

If you want to create a child checkin setting that inherits the properties of an existing checkin setting, select a checkin setting and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.

Field	Description
Description	Type a description.
Applications	Add or remove the applications to which this checkin setting applies. For example, adding the QA application would cause the checkin setting to only apply to matching quality assurance cases.
Silent checkin (in minor version)	Select to have the checkin performed in the background for minor versions.
Silent checkin (in same version)	Select to have the checkin performed in the background for same versions.
Allow major versions	Select to allow checkin of major versions.
Display log entry	Select to show the <b>Log entry</b> property for the user to add comments during checkin. The comments are saved in the <code>log_entry</code> property and can be shown in the audit.
Require log entry	Select to make log entry required.
Reset log entry before each checkin	Select to clear the <b>Log entry</b> field after each checkin.
Allow checkin from file	Select to allow checkin from the file, such as when importing content as a new version.
Request new rendition	Select to request new renditions of the content.
Keep symbolic version label	<p>You can configure processes such as lifecycles to apply additional labels on the content version. Select this option to keep the label on the current version.</p> <p>For example, if you apply the DRAFT label, D2 shows the current content as:</p> <ul style="list-style-type: none"> <li>1.0, CURRENT, DRAFT</li> </ul> <p>If this option is selected and an end user creates a new minor version, D2 transfers the version labels:</p> <ul style="list-style-type: none"> <li>1.1, CURRENT, DRAFT</li> <li>1.0</li> </ul> <p>If this option is not selected and an end user creates a new minor version, D2 keeps the additional labels on the version in which they were introduced:</p> <ul style="list-style-type: none"> <li>1.1, CURRENT</li> <li>1.0, DRAFT</li> </ul>

4. Click **Save**.

## Configuring Checkout

1. Navigate to **Go to > Checkout** from the menu bar.

- Click **New** to create a checkout setting.

If you want to create a child checkout setting that inherits the properties of an existing checkout setting, select a checkout setting and click **Create from**. [Understanding Parent and Child Configurations](#), page 16 contains more information on child configurations.

- Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this checkout setting applies. For example, adding the QA application would cause the checkout setting to only apply to matching quality assurance cases.
Allow checkout	Select to allow content checkout.
Warning message	Select to show a warning message before checkout.
Warning message <language>	Type a warning message.

- Configure checkout settings for XML applications:

Field	Description
Checkout range	Select the scope.
Checkout support documents as well	Select to checkout supporting documents included in the DocApp.

- Click **Save**.

## Configuring Uniqueness Check

You can configure D2 to check for content uniqueness using DQL qualification.

- Navigate to **Go to > Uniqueness check** from the menu bar.
- Click **New** to create a uniqueness check.

If you want to create a child uniqueness check that inherits the properties of an existing uniqueness check, select a uniqueness check and click **Create from**. [Understanding Parent and Child Configurations](#), page 16 contains more information on child configurations.

- Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this uniqueness check applies. For example, adding the QA application would cause the uniqueness check to only apply to matching quality assurance cases.

- Click **Add a check** to add a DQL qualification:

- You can use \$value and #repeatingvalue in **Qualification** and **Message**.

- b. Fill out the row as described in the following table:

Field	Description
Qualification	Type a DQL directive.
Message <language>	Type a warning message for when the content is not unique.

5. Click **Save**.

## Configuring Mass Update

You can allow users to update multiple content with a single process using the mass update component.

1. Navigate to **Go to > Mass update** from the menu bar.
2. Click **New** to create a mass update.

If you want to create a child mass update that inherits the properties of an existing mass update, select a mass update and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this mass update applies. For example, adding the QA application would cause the mass update to only apply to matching quality assurance cases.
Do not display warning message	Select to prevent D2 Client from showing a warning message for confirming the mass update.
Do not display mass update options dialog	Select to prevent D2 Client from showing the dialog box for end users to fill out the mass update property form.
Update virtual document and all descendants	Select to update a virtual document and all of its components. This option is disabled when you are not configuring a virtual document property page.
Update folder and all sub-folders and objects	Select to update sub-folders and content within sub-folders. This option is disabled when you are not configuring a folder property page.
Property page	Select the property page the user fills out.
Display only for users in this group	Select the user group that can use this mass update.  You can leave the field empty to allow all end users to access this mass update configuration.
Label <language>	Type a label.

4. Click **Save**.

# Configuring Content Creation Defaults

This chapter contains the following topics:

- [Understanding the Content Creation Process](#)
- [Configuring Creation Profiles](#)
- [Configuring Default Value Templates](#)
- [Configuring Linked Documents for Importing Emails](#)
- [Configuring Importing Email Attachments](#)
- [Configuring Importing Folder Structure](#)
- [Configuring XML Import](#)

## Understanding the Content Creation Process

End users can add content to the repository using two methods:

- Create content using a rendition format and template
- Import content from the local file directory

You need an additional configuration to allow end users to import attachments to email and messages. [Configuring Importing Email Attachments, page 58](#) contains further instructions.

You can configure actions requested of users and automated processes performed by D2 when content is created or imported. Automated processes can help users avoid manual content management. Use the following table to understand how to configure creation and import:

When content is created or configured, you can configure:

- A creation profile with at least one document type. Depending on the user group, application, and method of creation, the end user can select a document type from a creation profile. The document type applies property pages, default values, and so on to the created content.

If there is only one document type that the end user can select, the D2 Client content creation wizard automatically selects the document type and skips the selection page. You can configure creation profiles by context in this way to streamline the content creation process for end users.

For example, create a creation profile for the quality assurance writers group available for creation and import, then create a document type for drafts. You can then set configuration elements such as the quality assurance property page, a default value template, and so on.

[Configuring Creation Profiles, page 54](#) contains further instructions.

- A default value template to set initial property values. Default value templates set values to properties during content creation when the creation profile using the template is used. The end user can then edit the property page.

For example, create a default value template that sets the keywords quality assurance and Draft, uses the quality assurance property page, and enters the content into the quality assurance documentation workflow.

[Configuring Default Value Templates, page 56](#) contains further instructions.

- Configuration components and contexts to apply to the content. You can configure content-related configuration components such as property pages, permissions, inheritance, automatic file renaming, and so on. When the end user saves the property page during creation, D2 checks for context matches and runs the applicable configuration elements on the content.

For example, create configuration elements such as a quality assurance Draft security and autonaming of the file to conform with quality assurance documents. Create a context that applies for all dm\_document content for quality assurance with the a\_status Draft. After enabling the corresponding cell in the configuration matrix, whenever the end user creates a quality assurance document with the Draft status, D2 applies the configuration elements.

[Determining Which Creation Processes to Use, page 25](#) contains further information about creation-related configuration components.

## Configuring Creation Profiles

Before configuring creation profiles, configure the following components:

- Dictionary (required)
- Taxonomy
- Context (required)
- Property page (required)
- Inheritance
- Default value template
- Autonaming
- Autolinking
- Lifecycle
- Workflow

1. To configure:

- A non-context-based creation profile, navigate to **Creation > Creation profile** from the menu bar.
- A context-based creation profile, navigate to **Go to > Extended creation profile** from the menu bar. An extended creation profile must be mapped to a context for the content type dm\_folder. If an extended creation profile applies to content, the end user does not see regular creation profiles.

2. Click **New** to create a creation profile.

If you want to create a child creation profile that inherits the properties of an existing creation profile, select a creation profile and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name. The name appears in the configuration profile for extended creation profiles.
Description	Type a description.
Label	Type a label.
Available for	Select the creation method for which the profile is eligible. Only for a regular creation profile. <ul style="list-style-type: none"> <li>• Select <b>Create &amp; Import</b> to allow end users to select the creation profile in both content creation and import.</li> <li>• Select <b>Create</b> to allow end users to select the creation profile during content creation but not during content import.</li> <li>• Select <b>Linked document</b> to allow end users to configure linked documents during content creation and import.</li> </ul>
Users group	Select the user groups for which the creation profile applies. Only for a regular creation profile.
Folder properties used for creation	Select one or more properties. D2 only shows the creation profile for folders when the list properties match the <b>Name</b> of the creation profile. Leave this field blank if you do not want to restrict the creation profile by any property. Only for a regular creation profile. <p>For example, you can name a creation profile <code>Project A</code> and type the <code>keywords</code> property for this field. The end user does not receive the option to select this creation profile unless the content being edited contains <code>Project A</code> as a keyword.</p>
Hide inheritance tab	Select to hide the inheritance options from the creation profile. <p>If you hide the inheritance tab, no properties and content are inherited during creation and import.</p>
Properties inheritance	Select to enable inheritance of content properties.
Content inheritance	Select to enable inheritance of parent content.
VD structure inheritance	(D2 Client 3.1 only) Select to enable inheritance of virtual document structure.

4. Add or remove dictionaries and properties to the creation profile.
5. Use the list controls to add and remove document types and fill out the fields as described in the following table:
  - a. Fill out the default fields as described in the following table:

Field	Description
Property	Select a property to which the value selected from the dictionary is saved.
Values	Select the values from the dictionary to which the document type relates.
Type	Select the content type.
Property pages	Select the property page applied to the content.
Version	Type the starting version number of the new content.
Inheritance	Select the inheritance rule applied to the content.
Default values template	Select the default value template applied to the content.
Lifecycle	Select a lifecycle to which the content is entered.  The lifecycle sets the status of the content to the initial state, and if the lifecycle is set to <b>Execute actions on start</b> , the first action is executed.
Workflow	(D2 Client 3.1 only) Select a workflow that the content executes after the create or import process.

- b. Click **Add column** to add a column to the document types.
6. For extended creation profiles, toggle the configuration for contexts in the configuration profile.
7. Click **Save**.

## Configuring Default Value Templates

You can use default value templates to define the default values assigned to properties when content is created.

1. Navigate to **Creation > Default value templates** from the menu bar.
2. Click **New** to create a default value template.

If you want to create a child default value template that inherits the properties of an existing default value template, select a default value template and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name.
Description	Type a description.
Applications	Add or remove the applications to which this default value template applies. For example, adding the QA application would cause the default value template to only apply to matching quality assurance cases.

4. Click **+** to add properties and their default values:
  - a. Select a property in the **Properties** list box.

- b. Type the default value for the selected property in the **Default values** field.

The keywords you can use in the default values field are as described in the following table:

Keyword	Description
\$FILENAME	The file name.  During content export, you can store the file name into properties other than the <code>object_name</code> by using this keyword.  During content import, the file name of the imported file is stored in the property corresponding to the \$FILENAME value in the template.
\$USER	The connected user.
\$dqlvalue("<DQL>")	A DQL query.
\$TODAY	The current date.
\$NOW	The current date and hour.
\$ALIAS	The alias.

5. Click **Save**.

## Configuring Linked Documents for Importing Emails

If an end user imports an email without any attachments, the creation wizard skips the linked document steps.

1. Navigate to **Go to > Linked document** from the menu bar.
2. Click **New** to create a document link.

If you want to create a child document link that inherits the properties of an existing document link, select a document link and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this document link applies. For example, adding the QA application would cause the document link to only apply to matching quality assurance cases.

4. Add a document link by clicking **Add linked document**.

5. For each row of the table:

- a. Select the link type. The following table describes the three available types:

EMC Documentum

Type	Description
Relation	The document link is derived from a relation. Select a relation name and type.  If the linked documentation configuration is used by an end user for importing an email, D2 Client only allows end users to select the first configured relation.
VD and Relation	The document link is derived from a virtual document and a relation.  Select a relation name and type.
VD	The document link is derived from a virtual document.

- b. Select the creation profile for the content being created.
- c. Type the message shown before creating the document.
- d. Select one of the following:
  - **Required** to require the end user to configure a linked document.
  - **Silent creation** to create the linked document as a background process.

Always select a default value template when using silent creation to avoid property inheritance errors.

If you select **Required** or leave both options unselected, D2 Client shows end users the message typed in step 5c.

- 6. Click **Save**.

## Configuring Importing Email Attachments

You can configure content import such that when an end user imports an email with an attachment, the attachment is processed and saved to the repository as a rendition. The content types accepted are .eml or Outlook formats.

- 1. Navigate to **Creation > Mail attachments** from the menu bar.
- 2. Fill out the form as described in the following table:

Field	Description
Import attachments	Select to enable import of attachments.  When selected, the D2 Client user interface shows a checkbox asking users if they want to import the attachments.
Keep initial mail format	Select to retain the format of the attachment.
Make a rendition	Select to export the email as a rendition. <ul style="list-style-type: none"> <li>• <b>Keep attachments in rendition:</b> select to include email attachments in the rendition.</li> <li>• <b>Rendition format:</b> select the file format to save the email.</li> </ul>

3. Use the list controls for **Excluded attachment document format** to add or remove accepted file formats.
4. Click **Save**.

## Configuring Importing Folder Structure

**Note:** This is applicable for D2 Client 3.1 only. You can import a folder and its subfolders and content, and configure the folder type, security, and default autolink rules for the folders.

1. Navigate to **Go to > Structure import** from the menu bar.
2. Click **New** to create a folder structure import setting.

If you want to create a child folder structure import setting that inherits the properties of an existing folder structure import setting, select a folder structure import setting and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this folder structure import setting applies. For example, adding the QA application would cause the folder structure import setting to only apply to matching quality assurance cases.

4. Set import settings as described in the following table:

Field	Description
Folder Root type	Select the folder type applied to the root folder.
Autolink for Root	Select the autolink rule you want to use for placing the folder.
Folder type	Select the folder type applied to subfolders.
Security for tree folder	Select the security configuration you want used on the root folder and all subfolders.

5. Click **Save**.

## Configuring XML Import

Use XML import for the integration of:

- Large amounts of data, such as migrating a content management system or importing a content dump from an external application.
  - Content on a routine basis, such as the daily retrieval of content produced by another application.
- EMC Documentum

For example, you can configure an external application to save content to a specific folder. You can then configure the XML import component of D2 to scan the folder on a regular basis. D2 automatically imports content found into the repository.

1. Create a folder on the Content Server to store content imported into the repository.
2. In Documentum Administrator, configure D2JobImportMassCreate similarly to the example described in the following table:

If you are using a creation profile	If you are not using a creation profile
<code>-folder C:/d66_02/import</code>	<code>-folder C:/d66_02/import</code>
<code>-naming false</code>	<code>-naming false</code>
<code>-createconfig matrix_name</code>	
<code>-args argument_name</code>	

[List of D2 Jobs, page 171](#) contains further information.

3. In Documentum Administrator, configure D2JobCoreDeQueue similarly to the following example:

```
-scan_queue true
-naming true
-create true
```

[List of D2 Jobs, page 171](#) contains further information.

4. Create an XML file to function as a metadata template for the content imported from the folder. The XML must contain:

- A root element: `<?xml version="1.0" encoding="UTF-8"?>`
- Documentum attribute values: `<d2_import_xml>` followed by properties, such as `title`, `authors`, and `keywords`. The specific properties used in the XML file depend on the configuration of the content type and property page. You can designate a property as a repeating property by adding the `<value/>` tag.
- The same file name as the content to be imported. To import only the properties of content, name the XML file `<filename of the content>-meta.xml`
- If you did not use a creation profile using `-createconfig`, specify the `r_object_type` to determine the context and configuration components to use. If you do not set an `r_object_type` nor a `-createconfig`, D2 does not perform the import operation.

The D2JobImportMassCreate scans the folder as according to the configured interval, and D2JobCoreDeQueue browses the `d2c_mass_create_queue` to apply job parameters and D2CoreMethod to import the content into the repository.

## Configuring Content Processes Components

This chapter contains the following topics:

- [Understanding Lifecycles](#)
- [Configuring a Lifecycle](#)
- [Configuring a Lifecycle Batch](#)
- [Understanding Workflows](#)
- [Configuring a Workflow](#)

### Understanding Lifecycles

A lifecycle is a sequence of states and is used to:

- Denote the status of the content as it passes from one business protocol to another.
- Apply and change content retention and markup policies.

The following table describes an example lifecycle:

State	Conditions	Next state
Draft	None	Reviewed
Reviewed	Content is in Draft state r_lock_owner is empty	Draft Approved: requests electronic signature
Approved	Content is in Reviewed state Content is a PDF	None

In this example:

- Content can progress from Draft to Reviewed to Approved. Content can progress by repeatedly going to Draft after Reviewed.
- If you progress from Reviewed PDF to Approved, the system confirms the conditions have been met. If this progression requests an electronic signature, a prompt appears. When you electronically sign the approval, the system progresses the state to Approved.
- If you try to progress a spreadsheet instead of a PDF, the system rejects the progression request because one of the conditions was not met.

For each state, you can configure:

- Entry conditions for the state, such as conditions based on properties, permissions, and linked content.

- Actions to execute when moving to the next step, such as filling a property, creating a version, applying security, and changing the document state.
- Next states and transitions between states, such as popup dialog boxes, messages, and menu labels.

## Configuring a Lifecycle

1. Navigate to **Go to > Lifecycle** from the menu bar.
2. Click **New** to create a lifecycle.

If you want to create a child lifecycle that inherits the properties of an existing lifecycle, select a lifecycle and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Select a lifecycle.
Description	Type a description.
Applications	Add or remove the applications to which this lifecycle applies. For example, adding the QA application would cause the lifecycle to only apply to matching quality assurance cases.
Execute actions on start	Select to execute actions related to the lifecycle when an end user starts the lifecycle.
Alternate attribute for state (default is a_status)	Select a property to control the state of the content.

4. Click **Add lifecycle state** to add a state to the lifecycle:
  - a. Type a name for the lifecycle state.
  - b. Select **Start state** to initialize the content with the selected state.
  - c. Select **Direct state** if all states of the lifecycle can access the state.
5. Configure the entry conditions for each **Lifecycle state**:
  - a. Use the list controls to add, remove, and reorder entry conditions.
  - b. Fill out the form as described in the following table depending on the entry condition selected:

Entry condition	Description
Condition VD children	Select the lifecycle state that is required of all virtual document components, type a DQL request to filter virtual document components, and type a warning message that appears when the condition is not met.
Condition check by Method	Select the method to run for verifying that the condition is met, type arguments and parameters required by the method, and type a warning message that appears when the condition is not met.

<b>Entry condition</b>	<b>Description</b>
Condition on group	Select whether the group was <b>Saved in a property</b> or whether the end user types the group name using <b>Free input</b> . Type the property that contains the group or group name, select the dictionary and alias, and type a warning message that appears when the condition is not met.
Condition on linked document	Select the relation type for the linked documents, select the lifecycle and state to which the linked documents are to be set, and type a warning message that appears when the condition is not met.
Condition on property	Select the property, operation, and value for a property-based condition, and type a warning message that appears when the condition is not met.
Condition on rendition	Select the required rendition format, and type a warning message that appears when the condition is not met.
Condition on uniqueness	Select the configured uniqueness check that must be passed, and type a warning message that appears when the condition is not met.
Condition permission	Select the minimum permission level required, and type a warning message that appears when the condition is not met.

6. Click a state from **Lifecycle state** to configure the actions of each lifecycle state:
- Click **Add action** and select an action.
  - Fill out the form as described in the following table depending on the action selected:

<b>Action</b>	<b>Description</b>
Action on VD children	Select the lifecycle state you want to apply to all virtual document components and select actions you want ignored.
Apply autolink	No entry required. By default, D2 uses the highest priority configuration in the configuration matrix.
Apply autonaming	No entry required. By default, D2 uses the highest priority configuration in the configuration matrix.
Apply method	Select the method to run against the content and type the arguments and parameters required.
Apply parameters	No entry required. By default, D2 uses the highest priority configuration in the configuration matrix.
Apply security	No entry required. By default, D2 uses the highest priority configuration in the configuration matrix.
Change linked document state	Select the relation type for the linked documents, select the relation direction between the parent and child documents, and select the lifecycle and state to which the linked documents are set.

Action	Description
Change other versions state	Select the state you want other versions to be set to and type a DQL query to further specify the versions.
Copy repeating property	Select the repeating property you want to copy, the copy operation, the target property, and select <b>Remove duplicate values</b> if you want to remove duplicate values.
Make version	Select the type of versioning you want to perform.
Manage distribution	Select the distribution configuration and action you want to use.
Mark	Type a version label to <b>with value</b> .
Remove other versions	Select <b>Authorize destruction of annotated document</b> to enable removal of annotated content and type a DQL query to further specify the versions.
Rendition request	No entry required.
Send email	Select the mailing list configuration.
Send in workflow	Select the workflow configuration and type a name and note for the workflow being entered.
Set property	Select the property and type the value to assign.
Set repeating property	Select the repeating property and the set operation, type the value you want to assign, then select <b>Remove duplicate values</b> to remove duplicate values.
Snapshot	Type a title.
Unmark	Type a version label to <b>with value</b> .
Work offline	No entry required.
Delete this action	No entry required.

- c. Use **Action up** and **Action down** to reorder the lines in the table of actions..
7. Click a state from **Lifecycle state** to configure next states and transition condition:
  - a. Click **Add transition** and select a next state.
  - b. Fill out the form as described in the following table:

Field	Description
Type	Select the type of transition to perform during this state change.
Action to perform	(For D2 3.1 only) Select the type of action to perform. <ul style="list-style-type: none"> <li>• Checkin: check in the content.</li> <li>• ExportFile: export the content.</li> <li>• Insert PDF: insert a PDF inside the rendition.</li> </ul>

Field	Description
Dialog box	Select the dialog box to display as a popup form for the end user to fill.
Trigger event for transition	Select the event that serves as a trigger for automatic progression of the lifecycle. <ul style="list-style-type: none"> <li>• Check in: lifecycle progresses when checked in.</li> <li>• (For D2 3.1 only) Cancel checkout: lifecycle progresses when checkout is canceled.</li> <li>• D2 import: lifecycle progresses when the file is imported.</li> </ul>
Menu label <language>	Type a menu label that is visible when the end user opens the lifecycle context menu.
Electronic signature required	Select to require the reason with the electronic signature.
Intention required	Select to require an electronic signature to end the lifecycle state.
Intentions dictionary	Select a dictionary to enable users to select a reason from a list of options.
Confirmation message <language>	Type a confirmation message.

- c. Configure the entry conditions for each transition.
8. Configure the transition conditions for each **Lifecycle state**:
- Select a **Next state** to set a transition condition from the selected lifecycle state to the selected next state.
  - Use the list controls to add, remove, and reorder transition conditions.
  - Fill out the form as described in the following table depending on the transition condition selected:

Entry condition	Description
Condition VD children	Select the lifecycle state that is required of all virtual document components, type a DQL request to filter virtual document components, and type a warning message that appears when the condition is not met.
Condition check by Method	Select the method to run for verifying that the condition is met, type arguments and parameters required by the method, and type a warning message that appears when the condition is not met.
Condition on group	Select whether the group was <b>Saved in a property</b> or whether the end user types the group name using <b>Free input</b> . Type the property that contains the group or group name, select the dictionary and alias, and type a warning message that appears when the condition is not met.

Entry condition	Description
Condition on linked document	Select the relation type for the linked documents, select the lifecycle and state to which the linked documents are to be set, and type a warning message that appears when the condition is not met.
Condition on property	Select the property, operation, and value for a property-based condition, and type a warning message that appears when the condition is not met.
Condition on rendition	Select the required rendition format, and type a warning message that appears when the condition is not met.
Condition on uniqueness	Select the configured uniqueness check that must be passed, and type a warning message that appears when the condition is not met.
Condition permission	Select the minimum permission level required, and type a warning message that appears when the condition is not met.

9. Click **Save**.

## Configuring a Lifecycle Batch

You can configure lifecycle batches to control lifecycles for all content assigned to a context simultaneously. For example, you can create the Draft, Review, and Approved folders, and configure a context for each folder. Using autolink, you can configure D2 to place content created by an end user in the Draft folder. You can configure D2 to pass all content automatically within the Draft folder through the Review and Approved folders.

Lifecycle batches use the D2JobLifecycleBatch job. [List of D2 Jobs, page 171](#) contains further information.

1. Navigate to **Go to > Lifecycle batch** from the menu bar.
2. Click **New** to create a lifecycle batch.

If you want to create a child lifecycle batch that inherits the properties of an existing lifecycle batch, select a lifecycle batch and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Select a lifecycle batch.
Description	Type a description.
Applications	Add or remove the applications to which this lifecycle batch applies. For example, adding the QA application would cause the lifecycle batch to only apply to matching quality assurance cases.

Field	Description
Lifecycle	Select the lifecycle you want to use.
Target state	Select the target state.
Transition type	Select the type of transition performed.

- Click + to add and configure properties modified by the lifecycle batch.

Configure each property as described in the following table:

Field	Description
Property	Select a property from the list box.
Value	Type the value of the property.

- Click **Save**.

## Understanding Workflows

A workflow is a formalized version of a business process which has been broken down into individual tasks. Users use workflows to:

- Apply business processes into the lifecycle of a content.
- Support commenting, tracking of workflow progress, management of various participants, and attaching of supplementary content.

You can use Documentum Workflow Manager to create and configure workflows, then install them as templates into the repository. D2 Config recognizes the templates, allowing you to select the templates when creating a workflow for use by users in D2 Client. In order to use a workflow template in D2, the following conditions must be met:

- There must be a task.
- There must be a name for each task.
- There must be flow.
- There must be aliases for the recipients of the workflow.
- There must be triggers and transitions.
- There must be delegation if necessary.
- There must only be a single package from start to end.

**Note:** D2 workflows do not manage the Some users from group alias. You must configure workflows to use either the All users from group alias or the Single user from group alias. When you use the All users from group alias, a temporary group for the workflow instance is created and the list of recipients can be specified.

Also, automated delegation is not supported.

## Configuring a Workflow

If you used Documentum Workflow Manager to create a workflow template, you can use D2 to configure the workflow template to allow end users to perform business processes on content. When configuring the workflow template in Workflow Manager:

- Create short aliases in the list of performers.
- Do not use spaces in the list of performers.
- Do not select **Optional**.

D2 creates groups in real time to represent performers.

1. Navigate to **Go to > Workflow** from the menu bar.
2. Click **New** to create a workflow.

If you want to create a child workflow that inherits the properties of an existing workflow, select a workflow and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Workflow label <language>	Type a label that appears when the end user access the workflow context menu.
Description	Type a description.
Applications	Add or remove the applications to which this workflow applies. For example, adding the QA application would cause the workflow to only apply to matching quality assurance cases.
Workflow template	Select a workflow template.
View	Click to see a popup dialog with a graphical diagram of the workflow template.

4. Click **Add condition** and select entry conditions for the workflow.

Fill out the form as described in the following table depending on the entry condition selected:

Entry condition	Description
Condition on property	Select the property, operation, and value for a property-based condition, and type a warning message that appears when the condition is not met.
Condition permission	Select the minimum permission level required, and type a warning message that appears when the condition is not met.
Condition on group	Select whether the group was <b>Saved in a property</b> or whether the end user types the group name using <b>Free input</b> . Type the property that contains the group or group name, select the dictionary and alias, and type a warning message that appears when the condition is not met.

Entry condition	Description
Condition on rendition	Select the required rendition format, and type a warning message that appears when the condition is not met.
Condition check by Method	Select the method to verify that the condition is met, type arguments and parameters required by the method, and type a warning message that appears when the condition is not met.
Condition on uniqueness	Select the configured uniqueness check that must be passed, and type a warning message that appears when the condition is not met.

- a. Use **Condition up** and **Condition down** to reorder conditions.
5. Configure workflow abort options as described in the following table:

Field	Description
Lifecycle	Select the lifecycle to use for an aborted workflow.
Target state	Select the final state of the content.
Apply on attachments	Select the checkbox to apply the state to all associated content.

**Note:** During a workflow abort, the entry conditions set for the lifecycle state are not evaluated when the state is changed.

6. Select a task from the **Task configuration** list. Manual tasks are shown with a white background, while tasks that are automatically processed are shown with a gray background.
- a. Fill out the **Task parameters** tab as described in the following table:

Field	Description
Subject <language>	Type a subject to appear in the D2 Client user task inbox.  Use \$value (<property name>) to refer to properties.
Message <language>	Type the email message.
Category <language>	Type a category with which to associate the task when an end user sorts the Workflow task browser widget by category. You can create a subcategory using / to designate a category path. For example, to create the subcategory <i>Reviewing</i> under the category <i>Review Process</i> , type <i>Review Process/Reviewing</i> .  You can configure autolinks to organize the user task inbox.
Priority	Select a priority level for the task as it appears for end users in their list of tasks.
Display task in workflow manager	Select to show the task in the D2 Client workflow manager for end users.

Field	Description
Manual acquisition	<p>Select to require users to manually acquire a task. This is necessary when the manual task is set in Workflow Manager to use a single user from a group.</p> <p>When not selected, tasks are automatically considered being performed by the assigned user. Requiring users to manually acquire tasks adds a level of work to the end user in performing tasks, but lets you see when an end user has seen and acknowledged the task.</p>
Check lifecycle consistency on task end	Select to verify lifecycle entry conditions before an end user accepts or rejects a task.
Always display dialog box	Select to improve the speed of the validation process by hiding dialog boxes such as the comment box of a task.
Mandatory comments in case of reject	Select to require end users to provide comments when rejecting a task.
Mandatory comments in case of forward	Select to require end users to provide comments when forwarding a task.
Property page in case of reject	Select a property page to show when an end user rejects a task. The option enables end users to supply additional information for the content.
Property page in case of forward	Select a property page to show when an end user forwards a task. The option enables end users to supply additional information for the content.
Electronic signature required	Select to require an electronic signature to end a task.
Required for	Select which progression case for which you want an electronic signature.
Request a signature for each document	Select if you want a signature for each attached document.
Intentions dictionary	Select a dictionary to enable users to select a reason from a list of options.
Intention required	Select to require the reason with the electronic signature.
Audit information add-on	<p>Configure a manual tasks audit for electronic signatures by typing additional audit information.</p> <p>You can use the DQL keywords <code>\$value</code> and <code>\$dqlvalue</code> for this field.</p>
Audit task on acquisition	Select to audit when users acquire a task.
Audit choice of next task	Select to audit the progression of the task.
Don't send notification for this task	Select to avoid sending an email notification to the workflow performer.

You can use the `$value` keyword to use property values. For example, `$value (<document.property_name>)` shows the property of a document.

You can use the `$alias` keyword to use a dictionary.

You can use HTML in the body of the email.

- b. Fill out the **Participants management** tab as described in the following table:

Field	Description
Task participant	Type the alias of the group performing the task.
Can add or remove a task when the activity is running	Select to allow current performers to add or remove participants during workflow execution.  This option is only available for dynamic tasks.
Participants available and Participants modifiable	Use the list controls to configure available and modifiable participant lists.
Required	Select if a participant must be assigned the task.
Type	Select the user list to propose delegation.  You can use <b>DQL</b> or <b>Dictionary</b> to filter the list of users.  You can use the DQL keyword <code>\$value</code> .

- c. Fill out the **External task** tab as described in the following table:

Field	Description
Define external task	Select to send an email to an external participant.
Attach document	Select to allow attachment of documents.
Add workflow notes in the message	Select to allow addition of workflow notes to the message.
Add workflow scheme (HTML/VML)	Select to allow addition of the workflow scheme in HTML/VML format.
Add rendition with format	Click <b>Browse</b> , then use the list controls to modify the list of formats.
Checkin options	Select <b>Add as annotation</b> to check in the change as a content annotation.  Select <b>Silent checkin minor version</b> to check in the change as a minor version and as a background process.  Select <b>Silent checkin same version</b> to check in the change without version control and as a background process.  Select <b>No checkin</b> to not check in the change.
Log entry <language>	Type a log entry.
Mandatory attached file in case of reject	Select to require end users to attach a file if they reject the task.
Add reply as a workflow note	Select to add the mail message as a workflow note.

- d. Fill out the **Task follow up** tab as described in the following table:

Field	Description
Task duration in days	Type an integer for the total number of days allotted for the task.

Add or delete followup procedures using **Add notification** and **Delete this notification**, and configure the process as described in the following table:

Field	Description
Remaining days before	Type an integer for the number of days remaining in the task.  When the number of days remaining until the task deadline reaches the entered number, the follow up process is triggered.  You can type a negative integer to send a notification when the deadline has passed.
Notification recipients	Select one or more of the following users to receive the notification: <ul style="list-style-type: none"> <li>• <b>Supervisor</b></li> <li>• <b>Task owner</b></li> <li>• <b>Other</b></li> </ul> If you select <b>Other</b> , you can use the DQL keywords \$value, \$alias, and \$dqlvalue.
Action	You can select an action to perform on the workflow when the follow up is sent.
Subject <language>	Type the subject of the email.
Message <language>	Type the message body of the email.

You can use the \$value keyword to use property values. For example, \$value (<document.property\_name>) shows the property of a document.

You can use the \$alias keyword to use a dictionary.

You can use HTML in the body of the email.

- e. Fill out the **Reject follow up** tab as described in the following table:

Field	Description
Activities available	Select an activity in the list and click > to enable a follow up activity for this task.
Reject Follow up Activities	Select an activity in the list and click < to disable the activity as a follow up.

7. To configure a system task, fill out the form as described in the following table:

Field	Description
Label <language>	Type a label.
Transition type	Select the transition type.

Field	Description
Lifecycle	Select the lifecycle to use.
Target state	Select the lifecycle state for the content.
Apply on attachments	Select to add attachments during this process.
Add workflow properties	<p>Click <b>Browse</b>, then use &lt; and &gt; to modify the list of additional properties.</p> <p>For example, you can configure a workflow task to require users to fill out a date property page. The task can be performed at different stages of the workflow by different user groups, such as the Product team, the Testing team, and the Management team. To keep and show the dates input by the different teams, configure the date property as a workflow property. If you do not configure the property, you cannot display the dates.</p>
Display task in workflow manager	Select to show the task in the workflow manager.

8. To configure the performer list, configure the properties page using the editor. The buttons function the same as in the property page. For each participant, fill out the fields shown for the selected list control as described in the following table:

Field	Description
Participant	Select the participant being modified in this object. D2 can manage only one participant alias per task.
Default value	Type default values, such as user names.
Linked attribute	<p>Select a property. D2 sets the value of the property as the list of performers listed under the alias. You can use this property with a D2 security template to ensure that workflow performers have access rights to the documents in the workflow.</p> <p>If the workflow is set to allow multiple performers and the list of performers contains groups, D2 adds the individual users contained in the groups when the workflow is started. As a result, if a user is removed from a group after the workflow is started, D2 does not update the list of workflow performers and the linked attribute. You must manually remove users from the list of performers to update the linked attribute.</p>
Load asynchronously	Select to load values on click and filter as opposed to when the dialog box is opened. Use the option when the list contains a large number of values.
Label <language>	Type a label.
Read-only on startup	Select to disable the field in the workflow startup page.
Required on workflow start-up	Select to make the field required when the end user starts the workflow.

Field	Description
Type	Select DQL or Dictionary to filter the list and select or type the condition.
Rows number	Type the number of rows the field shows.
Required values count	Type the minimum number of values for accepting the performer list.
Maximum values count	Type the maximum number of values for accepting the performer list.
Sort list	Select to sort the list alphabetically.
Enable values import export	Select to enable the import and export of the list of performers in .xls format.
Popup width and Popup height	Type the size of the popup dialog.

9. To prevent workflow supervisors from changing the list of performers:
  - a. In **Participant's Structure**, select **Read-only on startup** for each performer.
  - b. On the **Participants management** tab, clear **Can add or remove a task when the activity is running** and remove the performer from **Participants modifiable**.

D2 requires default values when workflow supervisors cannot change performers.
10. Use the list controls to reorder tasks.
11. Click **Save**.

## Configuring D2 Search

This chapter contains the following topics:

- **Configuring Global Search Settings**
- **Configuring Advanced Search**
- **Configuring a Query Form Search**

### Configuring Global Search Settings

Configure the properties of the search engine, type, and results to apply to every search performed in D2 Client.

1. Navigate to **Interface > Search** from the menu bar.
2. Select a dictionary as described in the following table:

Field	Description
Dictionary for object type labels	Select a dictionary to add specific labels to object types.
Alias/Locale	Select an alias or language.

3. Use the list controls to configure the **Groups allowed to create public search**. Users in the selected groups can create and save public searches.
4. Configure the search engine as described in the following table:

Field	Description
Maximum results returned by search	Type an integer to restrict the number of maximum returned results. Type 0 to have all results shown.
Maximum number of asynchronous searches in a user session	(D2 3.1 only) Type an integer to restrict the number of asynchronous searches that a user can launch. Type 0 to allow an unlimited number of asynchronous searches.
Enable full text search	Select to enable full-text search. By default only simple searches are performed.

Field	Description
Quick search on all versions (default is CURRENT)	Select to enable quick search on all versions of content.  By default quick search is only executed on current versions of content.
Indexing engine choice	Select the search engine used by D2.  If you do not enable full-text searches, you do not have to select a search engine. Simple searches are performed using DQL queries and do not need an external search engine.  <b>DQL Fulltext</b> is the same as <b>Documentum xPlore</b> , except that end users cannot configure and use facets.  If you use <b>Documentum xPlore</b> , end users can set D2 Client to highlight search terms in the search results.

5. You can select and configure the OpenSearch Search engine for only the 3.1 version of D2 Client:
  - a. Configure the OpenSearch properties as described in the following table:

Field	Description
Search Engine URL	Type the search engine URL. You can define parameters.  For example, <code>http://exalead:10000/D2-Client/opensearch?q=corporate/tree:Top security_user:"\$USER" security_group:"\$USER_GROUPS"</code>
Open in a new window	Select the checkbox to open search results in a new window in D2 Client 3.1.
HTTP Method	Select the HTTP method to pass queries.
Number of results per page (if the user does not have paging)	Type the number of results per page.  D2 uses the field only if you use \$COUNTINDEX in the parameter list or in the search engine URL.
XSLT to use	Select the OpenSearch stylesheet for transformation (XSLT) operation to use.  Add XSLTs to D2 by naming the stylesheets <code>opensearch-<i>&lt;name&gt;</i>.xsl</code> and placing them in the <code>/system/D2/OpenSearch</code> folder. D2 automatically places all XSLTs found in the list box.  By default D2 uses the first XSLT it finds.

- b. Configure extensions to the search engine URL request to improve interoperability.
    - c. Click **Add a search extension** to add a search extension.
    - d. Fill out the **Search Extension** table as described in the following table:

Field	Description
Name	Type a name for the search extension.
Value	Type one of the available alias for the search extension.  \$STARTINDEX defines the starting index value of the pagination of results.  \$COUNTINDEX defines the number of results per page.  \$USERGROUP resolves the list of groups to which the user belongs.  \$USERTICKET resolves the Documentum ticket of the user.  \$DOCBASE resolves the repository name for which the search is being performed.
Type	Select <b>refine</b> to refine the search term.  Select <b>param</b> to add a security parameter.

6. If you select the Documentum xPlore search engine, fill out the form as described in the following table:

Field	Description
Use xPlore for all searches (even the one without full-text criteria)	Select to enable xPlore for all searches.  You can configure the length of the search summary D2 shows when configured to use xPlore. The <i>EMC Documentum xPlore Administration and Development Guide</i> contains further information.
Enable Facets	Select to enable search facets.  Facets represent one or more important characteristics of an object in the Documentum object model. Configure facets to search large data sets without explicit queries and to avoid queries that do not return desired results. The <i>EMC Documentum System Search Development Guide</i> contains further information about facets.  <a href="#">Configuring Advanced Search, page 78</a> contains further information on how to configure properties for use as facets.
Maximum number of result by Facet	Type the number of property values retrieved by facets.

7. Click **Save**.

## Configuring Advanced Search

Use search mapping to enable types and properties that have been defined in the repository for advanced searches. You can construct different search modules in accordance with different contexts.

1. Navigate to **Go to > Search** from the menu bar.
2. Click **New** to create an advanced search.

If you want to create a child advanced search that inherits the properties of an existing advanced search, select an advanced search and click **Create from**. [Understanding Parent and Child Configurations](#), page 16 contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this advanced search applies. For example, adding the QA application would cause the advanced search to only apply to matching quality assurance cases.

4. Use the list controls to configure the list of available types for **Type**.
5. Select an available type, select a property, and use the list controls to configure the list of **Properties of selected type**.
6. Select a property and select **Dictionary** or **DQL** to create input assistance:
  - a. If you select **Dictionary**, select a dictionary from the **Dictionary** list box, then an alias or a language from the **Alias/Locale** list box.
  - b. If you select **DQL**, type a DQL query in the **Query** field.
 

**Note**To ensure that a single document with multiple dates in a custom repeating date field displays as a single result in the search results:

    1. Configure `server.ini` of Content Server with `return_top_results_row_based=false` in the `[SERVER_STARTUP]` section.
    2. Include `r_object_id` in the SELECT statement of your DQL query.
  - c. Select **Use this property as a facet** to allow end users to select the property as a facet in searches.
  - d. Select **Facet selected by default for quick searches** to have quick searches use the property as a facet.
7. Click **Save**.

## Configuring a Query Form Search

Use query form searches to provide property templates to end users of D2 Client. End users can select a query form, fill out the properties, then search. The alternatives would be to perform:

- A standard search, in which end users can only input a general query.
- An advanced search, in which an end user must specify the properties they wish to use.

1. Navigate to **Go to > Query form** from the menu bar.
2. Click **New** to create a query form.

If you want to create a child query form that inherits the properties of an existing query form, select a query form and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this query form applies. For example, adding the QA application would cause the query form to only apply to matching quality assurance cases.
Label <i>&lt;language&gt;</i>	Type the form label.
Property page	Select the property page to display for the search from the list box.  You can preview the property page by clicking the magnifying glass.
Default value	Select a default value template to add values to the properties.  <b>Note:</b> For repeating attribute <code>r_creation_date</code> , if the field is non-mandatory and blank in the query form, then a default value of 01/01/1970 is used.
DQL	Type a DQL query using the attributes of the property page. Use <code>\$value(&lt;property name&gt;)</code> to retrieve the values of different properties.  Ensure that the DQL query is selective. Neither the <b>Maximum results returned by search</b> field in the global search configuration page nor the <code>dfc.search.max_results</code> options in <code>D2FS.properties</code> affect the result size returned by query forms. End users could experience performance issues when a large number of search results are returned.  <b>Note:</b> To ensure that a single document with multiple dates in a custom repeating date field displays as a single result in the search results: <ol style="list-style-type: none"> <li>1. Configure <code>server.ini</code> of Content Server with <code>return_top_results_row_based=false</code> in the <code>[SERVER_STARTUP]</code> section.</li> <li>2. Include <code>r_object_id</code> in the SELECT statement of your DQL query.</li> </ol>

Field	Description
Add mandatory attributes in hidden mode	<p>Select the option to retrieve properties required for content control in the search results.</p> <p>If you do not select the option, the search result returns an informational listing of matching content. In this state, you cannot make any changes to the retrieved content, including launching a lifecycle.</p> <p>If you select this option, some of the attributes included in the query may not be displayed in the results, as they are added in hidden mode. For example, <code>r_lock_owner</code> attribute.</p>
Add the user column preferences	<p>Select the option to retrieve content properties matching the column preferences of the user.</p> <p>If you do not select the option, added columns using properties that are not automatically retrieved for showing search results remain blank.</p>

4. Add the query form to a search category so that end users can locate it for use:
  - a. In the **Existing categories** browser, navigate to the folder in which you want to add the query form.
  - b. Type `<folder name>` in **Path**.
  - c. Type a description for the category.
  - d. You can configure the name, title, and user group permissions of a category by right-clicking the category and selecting **Modify search category**.
5. Click **Save**.

## Configuring Administrator-to-User Communication

This chapter contains the following topics:

- [Understanding How to Communicate with Users Through D2 and Email](#)
- [Configuring the Mail Server](#)
- [Configuring a Mailing List](#)
- [Configuring Options for Sending Emails through D2](#)
- [Configuring a Subscription](#)
- [Configuring a Distribution](#)

## Understanding How to Communicate with Users Through D2 and Email

If you have an email server to which D2 connects and communicates, you can configure:

- Mailing lists that end users can use to send pre-configured batch emails.
- The ability for end users to send emails directly from the D2 interface instead of having to open up an email application.
- Distributions that end users can use to create an email-based distribution of content for expedited and external validation.
- Subscriptions” that end users can use to receive email notifications for events, such as workflow and lifecycle tasks. An end user who creates or owns the subscription does not receive notifications even if the end user had configured to receive the subscription.

## Configuring the Mail Server

1. Navigate to **Tools > Email** from the menu bar.
2. Fill out the **Email server** form as described in the following table:

Field	Description
Protocol	Select the mail protocol used by the server.
Using SSL	Select to use an SSL connection.
Server	Type the server address for the email server.
Port	Type the port number for the server.
Login	Type the username for the email address to use when sending messages.

Field	Description
From address	Type an address to mask the sender email.
Password	Type the password for the username.
From name	Type the name to use when sending messages.

The email server is used for sending emails.

3. Fill out the **Email reception server** form as described in the following table:

Field	Description
Protocol	Select the mail protocol used by the reception server.
Using SSL	Select to use an SSL connection.
Server	Type the server address for the email server.
Port	Type the port number for the server.

The reception server is checked for received emails.

4. Fill out the **Accepted task account** form as described in the following table:

Field	Description
Login	Type the username for the email address to use when accepting tasks.
Address	Type an address to mask the sender email.
Password	Type the password for the username.

When using the email reception server, D2 logs into the accepted task account to accept tasks.

5. Fill out the **Rejected task account** form as described in the following table:

Field	Description
Login	Type the username for the email address to use when rejecting tasks.
Address	Type an address to mask the sender email.
Password	Type the password for the username.

When using the email reception server, D2 logs into the rejected task account to reject tasks.

6. Fill out the **Administration of errors into external task inbox** form as described in the following table:

Field	Description
Send back mail on task error	Select to send mail back to the sender if the email address used by the task assignee returns an error.
Active mail history	Select to enable keeping a history of emails, including duplicate messages, in the event that a message is sent back in the above option.

7. Click **Add a notification** to add an event:

Fill out the form for each row as described in the following table:

Field	Description
Event	Select or type the event to use from the list box. D2 accepts Documentum audit events as a trigger for sending a notification.  For example, if you want D2 to send a notification when a workflow is started, select or type <code>d2_workflow_started</code>
Subject <i>&lt;language&gt;</i>	Type the subject of the email.
Message <i>&lt;language&gt;</i>	Type the body of the email.

You can use the `$value` keyword to use property values. For example, `$value(<document.property_name>)` shows the property of a document.

You can use the `$alias` keyword to use a dictionary.

You can use HTML in the body of the email.

8. Click **Save**.

## Configuring a Mailing List

1. Navigate to **Go to > Mailing list** from the menu bar.
2. Click **New** to create a mailing list.

If you want to create a child mailing list that inherits the properties of an existing mailing list, select a mailing list and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this mailing list applies. For example, adding the QA application would cause the mailing list to only apply to matching quality assurance cases.
Attach document	Select to allow attaching of documents.
Attach rendition with format	Click <b>Browse</b> , then use $\rightarrow$ and $\leftarrow$ to configure the list of allowed rendition formats.  The end user can only add attachments that have an allowed rendition format.

4. Click **+** to add a recipient, then select or type a recipient.

Use the following table to understand the options shown:

Field	Description
User	Select a user from the list box.

Field	Description
Group	Select a user group from the list box.
Property value	Select a property to use the value of the property as the recipient.
Email address	Type an email address.

- Fill out the content of the email as according to the following table:

You can use the DQL keyword `$value(<property name>)`.

The body accepts HTML.

Field	Description
Email subject <code>&lt;language&gt;</code>	Type the subject of the email.
Email message <code>&lt;language&gt;</code>	Type the body of the email.

You can use the `$value` keyword to use property values. For example, `$value(<document.property_name>)` shows the property of a document.

You can use the `$alias` keyword to use a dictionary.

You can use HTML in the body of the email.

- Click **Save**.

## Configuring Options for Sending Emails through D2

- Navigate to **Go to > Send mail** from the menu bar.
- Click **New** to create an email sending option.

If you want to create a child email sending option that inherits the properties of an existing email sending option, select an email sending option and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

- Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this email sending option applies.  For example, if you add the <code>Quality Assurance</code> application, D2 makes the configuration available only when an end user interacts with content recognized by the <code>Quality Assurance</code> application.
Enable external recipients	Select to allow end users to add email addresses of recipients outside of the repository when sending an email through D2 Client.

Field	Description
Enable attachments	Select to allow end users to add attachments when sending an email through D2 Client.
Email subject <language>	Type the subject of the email.
Email message <language>	Type the body of the message.

You can use DQL substitutions such as `$value(object_name)` in the email subject and message. To specify the smart URL for the selected content item, use `$value(locate_url)`

4. Click **Save**.

## Configuring a Subscription

1. Navigate to **Go to > Subscription** from the menu bar.
2. Click **New** to create a subscription.

If you want to create a child subscription that inherits the properties of an existing subscription, select a subscription and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this subscription applies. For example, adding the QA application would cause the subscription to only apply to matching quality assurance cases.
Differ notifications	<p>Select the option to send notification events to the intermediate queue <b>subscription_audit</b>. After treating the queue, D2 launches the job <code>D2JobSubscriptionSendMail</code> to send the notification email to subscribed users.</p> <p>When using the delayed notification feature, configure the email message using <code>\$foreachdoc{ }</code> to list the documents.</p> <p>For example, <code>\$foreachdoc{\$value(title), \$value(r_modifier)}</code></p> <p>As <code>D2JobSubscriptionSendMail</code> sends a single message that can contain events for multiple documents, not configuring the message with the above syntax can cause confusion.</p>
Label <language>	Type a label.

4. On the **Events** tab, click **Add an event** to add an event:
  - a. Select an event to audit.

You cannot use the following events for event subscriptions because they do not apply to content:

- d2\_template\_
- d2\_taxonomy
- d2\_dictionary
- d2\_workflow\_added
- d2\_workflow\_removed
- d2\_workflow\_sent\_
- d2\_delegation
- d2\_connect

Event names may be suffixed by one or more characters.

- b. Type a DQL qualification to filter the event. If you want to configure more than one condition for an event, change the DQL qualification for the event instead of adding another instance of the event because you can only save one instance of a configuration for an event. For example, to configure an event for one of two titles, use the following query:

```
title='toto' or title 'titi'
```

5. Select the **Email** tab to configure notification parameters as described in the following table:

Field	Description
Attach document	Select to attach content to the notification message.
Attach rendition with format	Click <b>Browse</b> to add a rendition format.
Email subject <language>	Type the subject of the email.
Email message <language>	Type the body of the message.

You can use the \$value keyword to use property values. For example, \$value(<document.property\_name>) shows the property of a document.

You can use the \$alias keyword to use a dictionary.

You can use HTML in the body of the email.

6. Click **Save**.

## Configuring a Distribution

1. Navigate to **Go to > Distribution** in the menu bar.
2. Click **New** to create a distribution.

If you want to create a child distribution that inherits the properties of an existing distribution, select a distribution and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.

Field	Description
Description	Type a description.
Applications	Add or remove the applications to which this distribution applies. For example, adding the QA application would cause the distribution to only apply to matching quality assurance cases.
Attach document	Select to attach content to the distribution email.
Attach rendition with format	Click <b>Browse</b> to add the rendition formats you want to use when sending content.
Label <language>	Type a label.
Property page	Select a property page.  You can click the magnifying glass to preview the page.
Attribute which contains recipients	Select a property that contains the list of recipients.
Email subject <language>	Type the subject of the email.
Email message <language>	Type the body of the message.
Electronic signature	Select to require an electronic signature during when accepting a distribution and rejecting a distribution.
Intention required	Select to require the reason with the electronic signature.
Intentions dictionary	Select a dictionary to enable users to select a reason from a list of options.

You can use the `$value` keyword to use property values. For example, `$value(<document.property_name>)` shows the property of a document.

You can use the `$alias` keyword to use a dictionary, and you can use HTML in the body of the email.

4. Click **Save**.



## Configuring External Services

This chapter contains the following topics:

- [Configuring a Rendition Server Connection](#)
- [Configuring an Advanced Documentum Transform Services \(ADTS\) Rendition Server Connection](#)
- [Enabling a Branch Office Caching Service \(BOCS\) Element](#)

### Configuring a Rendition Server Connection

You cannot configure specific connections to rendition servers through D2 Config. Use D2 Config to send events and messages to preconfigured queues.

1. Navigate to **Go to > Rendition server** from the menu bar.
2. Click **New** to create a rendition server connection.

If you want to create a child rendition server connection that inherits the properties of an existing rendition server connection, select a rendition server connection and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this rendition server connection applies. For example, adding the QA application would cause the rendition server connection to only apply to matching quality assurance cases.
Queue name	Select the rendition server queue you want to use.  For example, when using default event names used by Documentum Content Server, you can select: <ul style="list-style-type: none"><li>• <b>dm_autorender_win31</b> for legacy PDF/HTML rendition requests.</li><li>• <b>dm_mediaserver</b> for other rendition requests</li></ul>
Priority	Select the processing priority.

Field	Description
Event	If you selected <b>dm_autorender_win31</b> , type rendition  If you selected <b>dm_mediaserver</b> , type dm_register_asset for imported items and dm_transcode_content for other rendition requests.
Message	Type the message you want accompanying the event.
Rendition format	Select format to which the rendition is created.
Don't overwrite the rendition of a document with the same format	Select if you do not want the rendition server to overwrite a rendition if a rendition of the same format already exists.

4. Click **Save**.

## Configuring an Advanced Documentum Transform Services (ADTS) Rendition Server Connection

You must configure ADTS servers to use thumbnail view mode.

1. Navigate to **Go to > Rendition server** from the menu bar.
2. Click **New** to create a rendition server connection.

If you want to create a child rendition server connection that inherits the properties of an existing rendition server connection, select a rendition server connection and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this rendition server connection applies. For example, adding the QA application would cause the rendition server connection to only apply to matching quality assurance cases.
Queue name	Select the queue <b>dm_mediaserver</b> .
Priority	Select the processing priority.
Event	Type the event dm_register_asset
Message	Do not type a message.

Field	Description
Rendition format	Select format to which the rendition is created.
Don't overwrite the rendition of a document with the same format	Select if you do not want the rendition server to overwrite a rendition if a rendition of the same format already exists.

4. Click **Save**.

## Enabling a Branch Office Caching Service (BOCS) Element

Set up BOCS elements that have been installed and configured in D2 Config to allow use by end users.

1. Navigate to **Go to > BOCS cache** from the menu bar.
2. Click **New** to create a BOCS element.

If you want to create a child BOCS element that inherits the properties of an existing BOCS element, select a BOCS element and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Select a BOCS element.
Description	Type a description.
Applications	Add or remove the applications to which this BOCS element applies. For example, adding the QA application would cause the BOCS element to only apply to matching quality assurance cases.

4. Click **Save**.



## Configuring D2 Config Tools

This chapter contains the following topics:

- [Configuring Relations](#)
- [Configuring Automated Delegation](#)
- [Configuring Fonts](#)
- [Configuring Access to D2 Client and D2 Config](#)
- [Configuring D2 Options](#)
- [Enabling Actions for Intelligent URLs](#)

## Configuring Relations

Create and configure relations in Documentum Application Builder, then install them into the repository. *EMC Documentum Administrator User Guide* contains further information. You can configure specific application of relations in D2, such as the type of relation, inheritance of the relation during versioning, and so on.

You can place controlled relations in property pages, so that end users can set related contents depending on the type of relation.

1. Navigate to **Tools > Relation** from the menu bar.
2. Click **New** to create a relation.

If you want to create a child relation that inherits the properties of an existing relation, select a relation and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. For each relation, fill out the row as described in the following table:

Field	Description
Relation Type	Select a relation type.
Permanent link	This field is automatically set, and it indicates the <code>permanent_link</code> property of the relation as created in Documentum Application Builder.  If <b>Permanent link</b> is set to <b>Yes</b> , new versions of the content creates a new, identical relation to keep the relation through versioning.
Multiple relation	Select if the relation is a one-to-many relationship.

Field	Description
Controlled relation	Select if you want the relation to only be set through the properties page.
Child version	<p>Select the behavior of the relation for child versions of the content.</p> <p>Select <b>All versions</b> to have each child version link to the relation. In this case, where one parent has a relation with multiple child versions, end users see one relation in the <b>Relation</b> tab when selecting the parent.</p> <p>Select <b>Current</b> to have the only the current version link to the relation. In this case, where a child document has relations toward several versions of the parent document, end users see one relation in the <b>Relation</b> tab when selecting the child.</p> <p>Select <b>Unique version</b> to have only the version used for creating the relation link to the relation.</p>

4. Click **Save**.

## Configuring Automated Delegation

Use the automated delegation tool to create automated delegation rules. For example, if a user goes on vacation for two weeks, you can create a rule to automatically delegate all workflow tasks from that user to specified users and groups.

1. Navigate to **Tools > Manage Delegations** from the menu bar.
2. Click **New** to create a delegation control.

If you want to create a child delegation control that inherits the properties of an existing delegation control, select a delegation control and click **Create from**. [Understanding Parent and Child Configurations](#), page 16 contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
User/Group name	Select a user or group who can setup a delegation for other D2 Client users.
Manage user/group delegations	<p>Select the list of users or groups for whom the automated delegations can be targeted.</p> <p>Click <b>Browse</b>, then use the list controls to add or remove automated delegation targets.</p>

4. Click **Save**.

## Configuring Fonts

You can configure the fonts used in the XSL outputs produced by plugins.

1. Navigate to **Tools > Fonts** from the menu bar.
2. Click **Import** to add a font, then fill out the table as described in the following table:

Field	Description
Name	Type a name.
File	Locate and select the font file.
Format	Select the file format.

3. Click **OK**.
4. Type a **Label**.
5. To save the font:
  - Click **Save** to save to the repository.
  - Click **Export** to export the font in a file format you want.

## Configuring Access to D2 Client and D2 Config

Configure access privileges to D2 Client and D2 Config based on user groups.

1. Navigate to **Tools > Options** from the menu bar.
2. Select **Display all groups** if you want to limit the list boxes to only the groups to which you have administrator rights.
3. Select user groups for the list boxes as described in the following table:

Field	Description
Access group for D2-Client	Select the user group to have access to D2 Client.
Access group for D2-Config	Select the user group to have access to D2 Config.
Access group for administration node	Select the user group to have access to the Users, Groups, Dictionaries, and Taxonomies widgets in D2 Client.
Access group for users administration node	Select the user group to have access to only the Users widget in D2 Client.
Access group for groups administration node	Select the user group to have access to only the Groups widget in D2 Client.
Group and user administration parent node	Select the user group to have access to the Users and Groups widgets in D2 Client.

If you leave the list box blank, all groups have access.

4. Click **Save**.

## Configuring D2 Options

1. Navigate to **Tools > Options** from the menu bar.
2. Fill out the form as described in the following table:

Field	Description
Copy not allowed	<p>Select content that you want to forbid copying. For example, you can prevent the copying of content with a counter in its name.</p> <p>To add a content set, select a set from <b>Document sets</b> and click the &gt; button.</p> <p>To remove a set, select a set from <b>Document set which copy is not allowed</b> and click the &lt; button.</p>
Clients URL	<p>Type client web application URLs to refresh the caches of application servers.</p> <p>Click <b>Add</b>, type the URL for the application server you want to add, and click <b>OK</b>.</p> <p>To remove a server, select the server and click <b>Delete</b>.</p>
Enable the Word files comparison	Select to enable comparison of content through two different versions of Word using the Versions widget.
Properties list display mode	<p>You can select the display mode for properties.</p> <p>Select <b>Name</b> for only names.</p> <p>Select <b>Label</b> for only labels.</p> <p>Select <b>Name (Label)</b> for names followed by labels.</p> <p>Select <b>Label (Name)</b> for labels followed by names.</p>
Use DocApp constraints in property pages	Select to use the constraints for values defined for the repository when the attributes were created in Documentum Application Builder.
Structure import	(For D2 Client 3.1 only) Select the creation profile to use for importing folder structure.

3. Click **Save**.

## Enabling Actions for Intelligent URLs

To prevent end users from performing unintended actions, such as deleting content, D2 set the default to have actions disabled for use in intelligent URLs. You can change the setting for an action to enable it for your end user.

1. Navigate to **Tools > Options** from the menu bar.
2. Use the list controls to add or remove **Allowed actions** in the **Allowed actions in URL** section.
3. Click **Save**.

## Auditing and Monitoring D2

This chapter contains the following topics:

- [Configuring Documentum Audit](#)
- [Configuring D2 Audit](#)
- [Monitoring D2](#)

### Configuring Documentum Audit

You can configure specific audit events for Documentum audit.

1. Navigate to **Tools > Documentum audit** from the menu bar.
2. Select **D2 connection audit** to log an audit event whenever a user connects to D2.
3. Use the list controls to select document types. D2 logs an audit event whenever content of the selected types is deleted.
4. Click **Save**.

### Configuring D2 Audit

Configure the audited D2 events and properties. The *EMC Documentum Content Server System Object Reference* contains further information on auditing non-D2 events.

1. Navigate to **Go to > Audit** from the menu bar.
2. Click **New** to create an audit template.

If you want to create a child audit template that inherits the properties of an existing audit template, select an audit template and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this audit template applies. For example, adding the QA application would cause the audit template to only apply to matching quality assurance cases.

4. Use the list controls to configure the list of **Audited events** and **Displayed events**.

The Audit widget only shows events in the **Displayed events** list.

If you place events in the **Displayed events** list, D2 only shows the listed events in the Audit widget.

Select **Limit the display to D2 events** if you want to remove non-D2 events from the events lists.

Select **Extended display** if you want to use extended messages to describe event information in the D2 Client Audit widget in place of standard Documentum columns.

5. Use the list controls to configure the list of **Audited properties**:
  - a. Select **Display previous and new value** if you want D2 to display the value change.
  - b. For a repeating property, select **Display only changes** if you want D2 to omit events that resulted in no change.
6. Click **Save**.

## Monitoring D2

You can access the D2 monitoring information by navigation to **Help > Monitoring** from the menu bar. This opens the **Monitoring** dialog box. The following table describes the information presented in the tabs:

Tab	Description
D2 reloading	Shows the state of D2 on application servers and checks that the URL is responsive.
Summary	Shows information about the JVM executing D2 on the operating system.
VM	Shows information about the JVM executing D2 on the virtual machine.
Memory	Shows information about the memory status for the JVM executing D2.
Threads	Shows information about the threads for the JVM executing D2.
Classes	Shows information about the classes for the JVM executing D2.
Documentum	Shows information about active sessions and Documentum resources.
D2 Cache	Shows the number of caches in use along with all statistical information.
ACS/BOCS	Shows the URL status of ACS and BOCS configured in Documentum Administrator.

Click **Refresh** to update all monitored information.

## Using D2 Config Configurations

This chapter contains the following topics:

- **Understanding D2 Configurations**
- **Backing Up a D2 Configuration**
- **Restoring a D2 Configuration**
- **Exporting a D2 Configuration**
- **Importing a D2 Configuration**
- **Importing a D2 Configuration Using a Command Line**
- **Resetting the D2 Configuration**

## Understanding D2 Configurations

You can back up all configurations in D2 for the repository for backup purposes as well as to transfer configurations through the importing feature. The actions you can take regarding configurations are:

- Backup
- Restore
- Export
- Import

You can view the version of the current configuration by navigating to About > D2 Solution > Configuration.

## Backing Up a D2 Configuration

1. To create a new configuration object:
  - a. Navigate to **File > Save configuration > Check in as new object** from the menu bar.
  - b. Select an application or select **All applications** to define the scope of the configurations you want to save.
  - c. Type a name and description of the configuration.
  - d. Click **OK**.
2. To save a configuration as a new version of an existing configuration object:
  - a. Navigate to **File > Save configuration > Check in configuration base** from the menu bar.
  - b. Select and edit a name.

- c. Select the version.
- d. Type a description.
- e. Click **OK**.

## Restoring a D2 Configuration

1. Navigate to **File > Restore configuration** from the menu bar.
2. Select a configuration.
3. Select the version you want to use.
4. Click **OK**.
5. Select options as described in the following table:

Option	Description
Full import with current config reset	Import the entire configuration and erase the current configuration
Full import without actual config reset	Import the entire configuration without erasing the current configuration. New contexts are placed between the lowest-priority context and the default context. Existing contexts keep their position.
Include imported modules relative to matrix switches	Import the toggled status of the configuration matrix.
Overwrite existing elements	Replace existing configurations with the imported configuration.
Do not overwrite the autonaming values in the new configuration	Keep existing values of autonaming counters.
Do not overwrite the cache URLs	Keep the cache URLs.
Do not overwrite the mail server configuration	Keep the mail server URLs.

6. Select a context from **Import the context before this context** to select the relative context when importing contexts to the configuration matrix.
7. Select all modules you want to import.
8. Click **OK**.

## Exporting a D2 Configuration

1. Navigate to **File > Export configuration** from the menu bar.
2. Select an application or select **All applications** to define the scope of the configurations you want to export.
3. To export all configurations, select **Full config export**. Otherwise select the modules to export.
4. Click **OK**.

## Importing a D2 Configuration

1. Navigate to **File > Import configuration** from the menu bar.
2. Select the configuration Zip file you want to import.
3. Click **Open**.
4. Select options as described in the following table:

Option	Description
Full import with current config reset	Import the entire configuration and erase the current configuration
Full import without actual config reset	Import the entire configuration without erasing the current configuration. New contexts are placed between the lowest-priority context and the default context. Existing contexts keep their position.
Include imported modules relative to matrix switches	Import the toggled status of the configuration matrix.
Overwrite existing elements	Replace existing configurations with the imported configuration.
Do not overwrite the autonaming values in the new configuration	Keep existing values of autonaming counters.
Do not overwrite the cache URLs	Keep the cache URLs.
Do not overwrite the mail server configuration	Keep the mail server URLs.

5. Select a context from **Import the context before this context** to select the relative context when importing contexts to the configuration matrix.
6. Select all modules you want to import.
7. If you are importing updates to existing configurations, select **Report extension configuration warnings** to generate a PDF report that lists the configurations that were changed.
8. Click **OK**.

## Importing a D2 Configuration Using a Command Line

1. Open a DOS or Linux console.
2. Type the following line:

```
java -cp [classpath] eu.c6.d2.api.config.batch.D2ConfigImport
[-login login_name] [-password password] [-docbase docbase_name]
[-config_file file_config_path] [-full_import true|false]
[optional parameters] [modules list]
```

The following table describes the parameters:

Parameter	Description
classpath	Classpaths contain D2 libraries, DFC libraries, and the <code>dfc.properties</code> file.

Parameter	Description
login	Repository connection login
password	Repository connection password
docbase	Repository name
config_file	Configuration file
full_import	Full or custom import based on true or false, respectively
reset	Reset of existing configuration
overwrite	Overwrite the existing configuration (default: false)
keep_naming_counter	Keep autonaming counters (default: false)
keep_url_cache	Keep cache URL values (default: false)
keep_mail_server	Keep mail server URL values (default: false)
help	Show a help message with a list of parameters.

## Resetting the D2 Configuration

You can erase the current configuration and revert to default settings.

1. Navigate to **File > Reset configuration** from the menu bar.
2. Click **OK**.

## Configuring D2 Client

This chapter contains the following topics:

- **Configuring a Gadget Server for D2 Client Widgets**
- **Configuring a D2 Client Workspace**
- **Designing a D2 Client Workspace**
- **Understanding the Border Layout Container**
- **Understanding the Tab Container**
- **Understanding the Accordion Container**
- **Understanding the Horizontal and Vertical Containers**
- **Configuring a D2 Client Theme**
- **Configuring an Internal Widget**
- **Configuring an External Widget**
- **Configuring D2 Client Menus**
- **Configuring Custom Icons for Rendition Formats and Content Types**
- **Configuring Icons and Text Color for Content Properties in List Widgets**
- **Configuring Display Filters**
- **Configuring D2 Client Column Preferences**
- **Configuring Access to Administration Widgets in D2 Client**
- **Refreshing and Reloading D2**

## Configuring a Gadget Server for D2 Client Widgets

You can configure the a gadgets server for external widgets. For example, Apache Shindig (<http://shindig.apache.org>) functions as a gadget server.

1. Make sure you have a gadget server installed and configured.
2. Navigate to **Widget view > Options** from the menu bar.
3. Type the server URL of the gadget server in **Gadget server url**.
4. Click **Save**.

## Configuring a D2 Client Workspace

1. Navigate to **Widget view > Workspace** from the menu bar.
2. Click **New** to create a workspace.

If you want to create a child workspace that inherits the properties of an existing workspace, select a workspace and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this workspace applies. For example, adding the QA application would cause the workspace to only apply to matching quality assurance cases.
Label <language>	Type a label.
Description <language>	Type a description.
Workspace structure file	Select the workspace XML to use as this template configuration.
Preview file	Select the preview image, if any, to use as a thumbnail so the end user has an idea of what the workspace looks like. If you do not select or import a thumbnail, D2 automatically generates a thumbnail.
Default theme	<p>Select the default color theme used for the workspace.</p> <p>You must select a theme.</p> <p>Define the default theme in the global registry doctype so that it is applied to the login screen and workspace gallery. Initially, the doctype settings are not retrieved and the theme does not display (please verify if this is correct). Ensure that the default theme is specified both for the global registry doctype setting and for retrieval. If multiple themes are checked in the default column in D2-Config, the theme from the first row is applied, by default.</p> <p>If you already have a default theme defined, import that default theme to the global registry doctype.</p>

4. Select whether the workspace uses multiple views. If you select **Multiple view**, use the list controls to add, remove, or reorder workspace views. For each view:
  - a. Type the label for the view in **View <language>**.
  - b. Click **Browse**, select a workspace XML, then click **OK**.
  - c. Click **View** to preview the workspace template.

5. Select **Lock workspace layout** to prevent end users from modifying the widgets contained in a workspace. Select this option to prevent end users from removing widgets that are necessary for context-sensitive widget operations. For example, you can configure the Locate widget so that when an end user selects content within the Locate widget, D2 makes the Doclist widget visible.
6. If you want to configure one or more events that cause D2 to set a workspace view to active:
  - a. Use the list controls for **Add focus events for the selected workspace view** to add, remove, or reorder D2 actions and events. [List of Widget Communication Channels, page 181](#) contains a list and description of the events, actions, and their parameters.
  - b. Select an event to configure its **Additional event parameters**.

For example, if you add and select the event `D2_EVENT_WIDGET_FOCUS` to the `TasksWidget`, you can type the parameter `widgetType==BrowserWidget`. When the end user selects the Document browser widget, D2 makes the selected workspace view visible and active, then sets focus to the Document browser widget if it is found in the new view.

You can also type the parameter `config==` and set the value to the **Name** of the widget. You can use this parameter to differentiate between instances of the same widget. For example, you can create a Document browser widget with the name `Word document browser` and another Document browser widget with the name `PDF document browser`. If you use `widgetType==BrowserWidget` D2 triggers the focus event for both widgets. If you use `config=="Word document browser"` you can specify the specified widget.

7. Click **Save**.

## Designing a D2 Client Workspace

The workspace XML must contain the following object:

```
<?xml version="1.0" encoding="UTF-8"?>
<root xsi:noNameSpaceSchemaLocation="SpaceSchema.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<space>
<border-layout-container>
</space>
</root>
```

There must only be one `<root>` tag at the beginning of the file, which contains one `<space>` tag.

The `<space>` tag requires at least one `<border-layout-container>`.

All containers may contain itself, other containers, or widgets. The following table lists the available containers and possible sub components:

Container	Subcomponents
Border layout container	Containers and widgets
Tab container	Widgets
Accordion container	Widgets
Vertical and horizontal containers	Containers and widgets

## Understanding the Border Layout Container

The border layout container is the main frame of the workspace. Border layout containers are composed of data nodes and content nodes.

Data nodes are exclusive to border layout containers and define the location and size of container elements. The following table describes the attributes you can use:

Attribute	Description
<code>layoutregion</code>	<p>Defines the location of a container element.</p> <ul style="list-style-type: none"> <li>• <code>NORTH</code> for north (top of the container)</li> <li>• <code>SOUTH</code> for south (bottom of the container)</li> <li>• <code>EAST</code> for east (right of the container)</li> <li>• <code>WEST</code> for west (left of the container)</li> <li>• <code>CENTER</code> for center (middle of the container).</li> </ul>
<code>size</code>	<p>Defines the default container size. You can define sizes in two ways, and D2 automatically detects the type.</p> <p>If you type a value greater than 0, the value is considered an absolute size in pixels. For example, D2 considers 100 to be 100 pixels.</p> <p>If you type a value less than 0, the value is considered a relative size. For example, D2 considers 0.5 to be 0.5%, or half the size of the window.</p>
<code>maxSize</code>	The maximum size for a container during resizing.
<code>minSize</code>	The minimum size for a container during resizing.
<code>split</code>	Determines enabling or disabling of resizing of the container. If <code>split</code> is set to <code>TRUE</code> , <code>maxSize</code> and <code>minSize</code> must be set.

There must be a content node for each data node, and they define the elements used in a container. If the element is a widget, you must specify the name of the widget. If the element is a container, you must specify the name of the container. The number of elements that can be defined is limited to 5 for display reasons.

The following image contains an example code of a border layout container with data and content nodes:

```

<?xml version="1.0" encoding="UTF-8"?>
- <root xsi:noNamespaceSchemaLocation="SpaceSchema.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  - <space>
    - <border-layout-container>
      - <data>
        <border-layout-data split="true" layoutregion="CENTER"/>
        <border-layout-data split="true" layoutregion="EAST" maxSize="500" minSize="150" size="480"/>
        <border-layout-data split="true" layoutregion="WEST" maxSize="500" minSize="150" size="260"/>
      </data>
      - <content>
        - <tab-container>
          - <content>
            <widget config="doclist"/>
            <widget config="docgallery"/>
          </content>
        </tab-container>
        - <border-layout-container>
          - <data>
            <border-layout-data split="false" layoutregion="NORTH" maxSize="100" minSize="100" size="100"/>
            <border-layout-data split="false" layoutregion="CENTER"/>
          </data>
          - <content>
            <widget config="quicksearch"/>
            - <accordion-container>
              - <content>
                <widget config="locations"/>
                <widget config="versions"/>
                <widget config="renditions"/>
                <widget config="relations"/>
                <widget config="audits"/>
              </content>
            </accordion-container>
          </content>
        </border-layout-container>
        <widget config="browser"/>
      </content>
    </border-layout-container>
  </space>
</root>

```

## Understanding the Tab Container

The tab container is a type of horizontal layout with tab items organized horizontally.

Tab containers contain a single content node. Add a widget to the layout by entering the name of the widget in the `<widget config>` tag. There is no limit to the number of widgets you can put in a tab container. You do not need to define a size, as the tab container uses the size as determined by its parent container.

The following image contains an example of a tab container:

```

- <tab-container>
  - <content>
    <widget config="doclist"/>
    <widget config="docgallery"/>
  </content>
</tab-container>

```

## Understanding the Accordion Container

The accordion container is a type of vertical layout with tab items organized vertically.

Accordion containers contain a single content node. Add a widget to the layout by entering the name of the widget in the `<widget config>` tag. There is no limit to the number of widgets you can put in an accordion container. You do not need to define a size, as the accordion container uses the size as determined by its parent container.

The following image contains an example of an accordion container:  
EMC Documentum

```
- <accordion-container>
  - <content>
    <widget config="locations"/>
    <widget config="versions"/>
    <widget config="renditions"/>
    <widget config="relations"/>
    <widget config="audits"/>
  </content>
</accordion-container>
</content>
```

## Understanding the Horizontal and Vertical Containers

Use horizontal and vertical containers to organize elements horizontally and vertically, respectively.

Horizontal and vertical containers can contain containers and widgets, which are placed in a content node. Resizing is disabled for horizontal and vertical containers.

The following image contains an example of a horizontal container:

```
- <horizontal-container>
  - <content>
    <widget config="browser"/>
    <widget config="doclist"/>
  </content>
</horizontal-container>
```

The following image contains an example of a vertical container:

```
- <vertical-container>
  - <content>
    <widget config="taskfolders"/>
    <widget config="tasks"/>
  </content>
</vertical-container>
```

## Configuring a D2 Client Theme

You can configure color themes that end users can select and use on their D2 Client workspaces. You can define the colors of the background, logo, borders, and so on.

1. Navigate to **Widget view > Theme** from the menu bar.
2. Click **New** to create a theme.

If you want to create a child theme that inherits the properties of an existing theme, select a theme and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.

Field	Description
Applications	Add or remove the applications to which this theme applies. For example, adding the QA application would cause the theme to only apply to matching quality assurance cases.
Label <language>	Type a label.

4. Configure the application header as described in the following table:

Field	Description
Logo	Select a logo from the list box.  If you want to import a new logo, click <b>Browse</b> and fill out the <b>Import</b> dialog box. Use an image with a maximum dimension of 250 pixels width by 50 pixels height.
Background	Select a background color using the <b>Color selection</b> dialog box.
Normal	Select a color for the menu icons, labels, and buttons in the normal state using the <b>Color selection</b> dialog box.
Hover	Select a color for the menu icons, labels, and buttons for when an end user mouses over the menu using the <b>Color selection</b> dialog box.

5. Configure the workspace tabs as described in the following table:

Field	Description
Tab label	Select a color for the workspace tab label and workspace menu button using the <b>Color selection</b> dialog box.
Border	Select a color for the horizontal border below the workspace tabs using the <b>Color selection</b> dialog box.

6. Configure the widget tabs, borders, and item selection as described in the following table:

Field	Description
Tab label - Active	Select a color for the tab label, menu button, and button label for an active widget using the <b>Color selection</b> dialog box.
Tab label - Inactive	Select a color for the tab label and menu button for an inactive widget using the <b>Color selection</b> dialog box.
Tab background - Active	Select a color for the tab background and buttons for an active widget using the <b>Color selection</b> dialog box.
Tab background - Inactive	Select a color for the tab background for an inactive widget using the <b>Color selection</b> dialog box.
Use transparent tab background	Select this option to alter the theme to use transparent widget tabs and a larger tab font.

Field	Description
Selected Item - Active	Select a background color for a selected item in a grid, menu, list, and tree for an active widget using the <b>Color selection</b> dialog box.  This color does not apply to the text color of the selected item. Depending on the color selected, D2 sets the text color to black or white for visibility.
Selected Item - Inactive	Select a background color for a selected item in a grid, menu, list, and tree for an inactive widget using the <b>Color selection</b> dialog box.  This color does not apply to the text color of the selected item. Depending on the color selected, D2 sets the text color to black or white for visibility.
Border - Active	Select a color for the panel border for an active widget using the <b>Color selection</b> dialog box.

7. Configure the application background as described in the following table:

Field	Description
Single color	Select this option to use a solid color background. Select a color using the <b>Color selection</b> dialog box.
Gradient	Select this option to use a gradient color background. Select a <b>Start color</b> and an <b>End color</b> for the gradient using the <b>Color selection</b> dialog box.
Image	Select this option to use a background image. Select a background image from the list box. If you want to import a new background image, click <b>Browse</b> and fill out the <b>Import</b> dialog box.
Use white dialog background	Select this option if you want dialog boxes to use a white background. If you do not select this option, dialog boxes use the application background.

8. Click **Save**.

## Configuring an Internal Widget

Internal widgets are user interface components used to display internal repository information.

1. Navigate to **Widget view > Widget** from the menu bar.
2. Click **New** to create a widget.

If you want to create a child widget that inherits the properties of an existing widget, select a widget and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this widget applies. For example, adding the QA application would cause the widget to only apply to matching quality assurance cases.
Label <i>&lt;language&gt;</i>	Type a label.
Description <i>&lt;language&gt;</i>	Type a description.
Widget type	Select the widget type from the list box containing internal widgets. <a href="#">List of Widgets, page 167</a> contains more information about the widgets.
Preview file	Select the preview image to use as a thumbnail preview. If you do not select or import a thumbnail, D2 uses a default image.

4. You can add and configure events that cause D2 to set a widget to active:
  - a. Use the list controls for **Add focus events** to add, remove, or reorder D2 actions and events. [List of Widget Communication Channels, page 181](#) contains a list and description of the events, actions, and their parameters.
  - b. Select an event to configure its **Additional event parameters**.

For example, you can add and select the event `D2_EVENT_WIDGET_FOCUS` to a `TasksWidget` and set the parameter and value `widgetType==TaskFoldersWidget`. When the end user selects the Tasks browser widget, D2 makes the Workflow tasks widget visible if the widget exists in the current workspace view.

To differentiate between instances of the same widget, use the parameter `config==` and set the value to the **Name** of the widget. For example, you can create a Document browser widget with the name `Word document browser` and another Document browser widget with the name `PDF document browser`. If you use `widgetType==BrowserWidget` D2 triggers the focus event for both widgets. If you use `config=="Word document browser"` you can specify the specified widget.

5. To configure a search query form widget, select a configured query form from the **Query form** list box.

Each instance of the search query form widget can only pertain to a single type of query form. Use a naming convention that makes it clear to both administrators and end users that the widget is configured for a specific query form. For example, you can use the widget name `SQF QA General Documents` to indicate that the widget uses the QA General Documents query form.

6. If you are configuring a `ThumbnailsWidget` or a `DoclistWidget`, fill out the **Parameters** fields as described in the following table:

Field	Description
Enable breadcrumb	Select to show a container path breadcrumb at the top of the widget.
Content type	Select <b>DQL</b> to configure the widget to show a list of content based on a DQL query.

Field	Description
DQL Query	<p>Type the DQL query the widget uses for retrieving its list of content.</p> <p>You can use the \$value wildcards:</p> <ul style="list-style-type: none"> <li>• \$value(r_object_id): Add the selected content.</li> <li>• \$value(all): Add filtered content.</li> </ul> <p>You can use \$value(all) when the widget shares a context with a filter configuration that is set to show all versions. D2 then finds and replaces \$value(all) with (all) at runtime. Therefore, you must place \$value(all) after the type in the DQL query.</p> <p>For example: from &lt;type&gt; \$value(all)</p> <ul style="list-style-type: none"> <li>• \$value(default_attributes): Add the attributes you want shown as columns.</li> <li>• \$value(preferences_attributes): Add user preference attributes.</li> </ul> <p>The DQL generated by \$value(preferences_attributes) includes a preceding comma, for example , object_name, a_status, r_modify_date, r_modifier</p> <p>As a result, \$value(preferences_attributes) must never:</p> <ul style="list-style-type: none"> <li>• Be the only attribute in the D2 DQL query.</li> <li>• Be the first attribute in the D2 DQL query.</li> <li>• Have a comma between the preceding attribute and itself in the D2 DQL query.</li> </ul> <p>If the DQL query is invalid, D2 ignores the query and does not show an error message to indicate a problem with the query. The widget shows an empty list of content.</p>
Override event subscribe	Select to override the events for which the widget refreshes.
Subscription events	Use the list controls to add or remove the events that trigger the widget to refresh.
Override event publish	Select to override the events for which the widget outputs information.
Loading events	Use the list controls to add or remove the events that trigger when the widget loads.

Field	Description
Select events	Use the list controls to add or remove the events that trigger when the end user selects content.  Make sure the event matches the content type being shown by the widget. For example, if you configure the widget to show folders, you must use <code>D2_EVENT_SELECT_FOLDER</code> or the widget shows an error. If you configure the widget to show a mix of content, use <code>D2_EVENT_SELECT_OBJECT</code> or create a custom event to work with the widget.
Double-click events	Use the list controls to add or remove the events that trigger when the end user double-clicks content.

7. If you are configuring a `BrowserWidget`, type the path to a cabinet or folder in the **Starting path** field. The end user can only browse the entered cabinet or folder when using the widget.
8. If you are configuring a `PropertiesWidget`:
  - a. If you want the properties widget to open properties in edit mode instead of view mode, select **Enable auto edit**.
  - b. If you want the properties widget to broadcast a `D2_ACTION_REFRESH_DOCUMENT` event, select **Enable refresh**. Widgets that listen to the refresh event do not automatically change locations even if D2 moves the content to a different folder based on the updated property values input by the end user.

If you do not select this option, the widget broadcasts the more resource-consuming `D2_ACTION_LOCATE_OBJECT` event. If D2 moves the content to a different folder based on the updated property values input by the end user, widgets that listen to the locate event automatically move to the new location of the content.

9. Click **Save**.

## Configuring an External Widget

External widgets are user interface components used to display external web information using a third-party web application. You can configure external widgets to communicate with content properties.

1. Navigate to **Widget view > Widget** from the menu bar.
2. Click **New** to create a widget.

If you want to create a child widget that inherits the properties of an existing widget, select a widget and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Make sure a gadget server is configured in the Widget View options. [Configuring a Gadget Server for D2 Client Widgets, page 103](#) contains further instructions.
4. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.

Field	Description
Description	Type a description for the widget in D2 Config.
Applications	Add or remove the applications to which this widget applies. For example, adding the QA application would cause the widget to only apply to matching quality assurance cases.
Label <language>	Type a label.
Description <language>	Type a description for the widget to appear in the D2 Client Widget Gallery.
Widget type	Select <b>ExternalWidget</b> .
Widget url	Type either a static or dynamic URL.  You can use \$GADGET_SERVER as a keyword for the gadget server URL set in widget options.  For example, \$GADGET_SERVER/gadgets/ifr?url= http://www.labpixies.com/ campaigns/weather/weather.xml
Bidirectional communication	Select if the widget communicates with the portal using an Open Ajax Hub.
Communication channel	Use the list controls to select a communication channel for transmitting information between widgets and repositories.  <a href="#">List of Widget Communications Channels, page 181</a> contains further information.
Preview file	Select the preview image, if any, to use as a thumbnail so the end user has an idea of what the widget looks like. If you do not select or import a thumbnail, D2 uses a default image.

5. Click **Save**.

## Configuring D2 Client Menus

You can modify the position, label, display conditions, and contents of the menu in D2 Client.

- Navigate to **Go to > Menu D2** from the menu bar to configure the following menus for D2 Client:
  - Menu bar (New, Import, Content, Help)
  - Right click on Location widget
  - Right click on Relation widget
  - Right click on Rendition widget
  - Right click on Version widget
  - Right click on Task detail widget
  - Right click on a list widget
  - Right click on Admin Dictionary widget

- Right click on Admin Group widget
  - Right click on Admin Taxonomy widget
  - Right click on Admin User widget
  - Right click on Multisearch widget
  - Right click on Tasks list widget
  - Right click on VD widget
  - Right click on Workflow widget
2. Click **New** to create a menu.

If you want to create a child menu that inherits the properties of an existing menu, select a menu and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this menu applies. For example, adding the QA application would cause the menu to only apply to matching quality assurance cases.

4. You can add menu buttons as described in the following table:

Action	Description
Add separator	Add a line to partition the menu.
Add menu item	Add a menu entry.
Add sub-menu item	Add a menu as a submenu that an end user can view by expanding the parent menu entry.
Add dynamic menu item	Add a menu entry that executes a Java class.  You can only add dynamic menu items to context menus.

5. Configure menu entries:

- a. Configure the appearance of the selected menu entry as described in the following table:

Field	Description
Hide this entry	Select to hide the menu item users of the specified application.
Label <i>&lt;language&gt;</i>	Type a label.
Shortcut	Select a shortcut key for accessing the menu entry.  Make sure to validate shortcuts by testing the key in D2 Client, as D2 Config does not check for conflicting shortcuts.

- b. Configure the actions assigned to the selected menu entry as described in the following table:

Field	Description
Action	Select a Javascript action for the button to perform.
Message	Type additional parameters to be read by services. This field is only useful for service customizations.  The message that is typed in this field allows administrators to add additional parameters or change the built-in parameter value. If you do not input an eligible parameter it does not have any effect or may cause the configuration to fail.
Manager	Select the <code>Manager</code> parameter for the selected Javascript action.
Sub menu	Select a menu to be shown as a submenu.  For example, selecting <code>MenuContextAdminTaxonomy</code> from the submenu list box adds the most recent version of the menu for <b>Right click on Admin Taxonomy widget</b> as a submenu.
Java class	Select the Java class to execute if the menu item is dynamic.

- c. Configure the display conditions of the selected menu entry as described in the following table:

Field	Description
Display conditions	Use display conditions to define the rules and scope of D2 shows the menu entry.  Click <b>Browse</b> to add display conditions.  Click <b>Delete</b> to remove display conditions.  Use the list controls to move conditions up and down the list.
Display disabled instead of hidden	Select whether to show the menu entry as grayed out or hide the menu entry from view.
Invert the condition	Select to invert the condition.  For example, you want to have a particular cabinet shown to everyone except for users who have the consumer role. You set the display condition <code>user has client capability equals consumer</code> and then select to invert. The display condition then changes to <code>user has not client capability equals consumer</code>

- d. If you select a display condition that uses a DQL query, fill out the three fields as described in the following table:

Field	Description
Condition valid on	Select whether the DQL query applies: <ul style="list-style-type: none"> <li>• If at least one selected content fits the condition.</li> <li>• If all selected content fit the condition.</li> </ul>

Field	Description
Property	Select the property for the DQL query.
Value	Type the parts of the DQL query after the <code>select</code> and <code>from</code> conditions. The DQL query must use the wildcard <code>\$value(r_object_id)</code> to refer to the selected object or objects. For example:  <pre>dm_document (all) where r_object_id=' \$value(r_object_id) ' and a_status='Draft'</pre> D2 automatically generates the <code>select</code> and <code>from</code> parts of the DQL query.

6. Drag and drop menu items to reorder.
7. Click **Save**.

## Configuring Custom Icons for Rendition Formats and Content Types

You can configure custom icons for renditions formats and content types in the list and thumbnail widgets. If D2 finds that the configuration for the content type and rendition format conflicts for given content, D2 uses the configuration for the content type.

You can create a custom icon configuration with or without property styling. [Configuring Icons and Text Color for Content Properties in List Widgets, page 118](#) contains more information on configuring property styles.

1. Navigate to **Widget view > Graphics** from the menu bar.
2. Click **New** to create a graphics configuration.

**Note:** In the configuration matrix, you can configure graphics only for group or user contexts.

If you want to create a child graphics configuration that inherits the properties of an existing graphics configuration, select a graphics configuration and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name.
Description	Type a description.
Applications	Add or remove the applications to which this graphics configuration applies. For example, adding the QA application would cause the graphics configuration to only apply to matching quality assurance cases.

4. Use the list controls to add, remove, and reorder rendition formats. D2 gives icon priority to lower rows. Fill out the row for each rendition as described in the following table:  
EMC Documentum

Field	Description
Format Name	Select the rendition format from the list box.
List Icons	Select an icon for list widgets from the list box.  If you want to import a new icon, click <b>Browse</b> and fill out the <b>Import</b> dialog box. Use a 16x16 pixel image at 72 DPI.
Thumbnail Icons	Select an icon for thumbnail widgets from the list box.  If you want to import a new icon, click <b>Browse</b> and fill out the <b>Import</b> dialog box. Use a 64x64 pixel image at 72 DPI.

5. Use the list controls to add, remove, and reorder content types. D2 gives icon priority to lower rows. Fill out the row for each content type as described in the following table:

Field	Description
Type Name	Select the type from the list box.
List Icons	Select an icon for list widgets from the list box.  If you want to import a new icon, click <b>Browse</b> and fill out the <b>Import</b> dialog box. Use a 16x16 pixel image at 72 DPI.
Thumbnail Icons	Select an icon for thumbnail widgets from the list box.  If you want to import a new icon, click <b>Browse</b> and fill out the <b>Import</b> dialog box. Use a 64x64 pixel image at 72 DPI.

6. Click **Save**.

## Configuring Icons and Text Color for Content Properties in List Widgets

You can configure an icon and color-coding for content properties in the columns of list widgets. For example, you can add an icon to the document status property and change the text color to show blue for *Draft*, green for *Accepted*, and red for *Rejected*.

You can configure property styling with or without custom icon configurations. [Configuring Custom Icons for Rendition Formats and Document Types, page 117](#) contains more information on custom icon configurations.

1. Navigate to **Widget view > Graphics** from the menu bar.
2. Click **New** to create a property style.

If you want to create a child property style that inherits the properties of an existing property style, select a property style and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name.
Description	Type a description.
Applications	Add or remove the applications to which this property style applies. For example, adding the QA application would cause the property style to only apply to matching quality assurance cases.

4. Use the list controls to add and remove properties. Fill out the row for each property as described in the following table:

Field	Description
Property	Type the name of the property.
Value	Type the value of the property.  For example, you can type <code>a_status</code> in the <b>Property</b> and <code>Draft</code> in the <b>Value</b> to configure a style for when D2 sets the lifecycle state of a document to <code>Draft</code> .
Icon	Select an icon from the list box.  If you want to import a new icon, click <b>Browse</b> and fill out the <b>Import</b> dialog box. Use a 16x16 pixel image at 72 DPI.  For example, if you configure the <code>Draft</code> value to show a pencil icon, the document status column shows the icon followed by the value.
Icon only	Select this option to replace the property value with the icon.  For example, if you configure the <code>Draft</code> value to show a pencil icon and select <b>Icon only</b> , the document status column only shows the icon.  The end user can still filter and search content based on the property because the option hides but does not remove the value.
Text Color	Select the color of the property text using the <b>Color selection</b> dialog box.  You do not need to select a color if you selected <b>Icon only</b> because D2 does not show the value.

5. Click **Save**.

## Configuring Display Filters

You can create and configure display filters that end users can select in D2 Client. Display filters affect the content shown in the Document list widget. For example, you can create a quality assurance filter that only shows content labeled with the keyword QA. You can create a quality assurance Draft filter that only shows content labeled with the keyword QA with the status Draft.

1. Navigate to **Go to > Filter** from the menu bar.
2. Click **New** to create a display filter.

If you want to create a child display filter that inherits the properties of an existing display filter, select a display filter and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

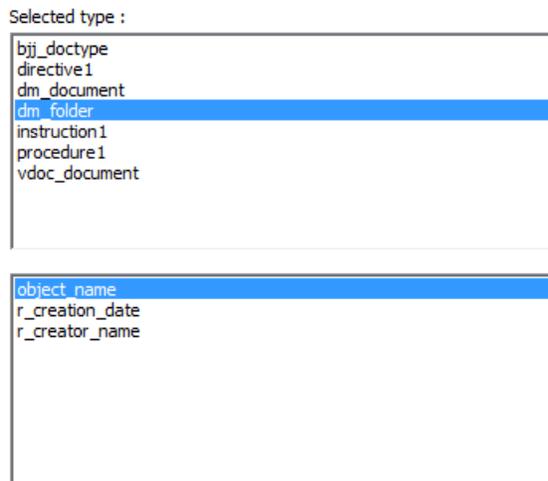
Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this display filter applies. For example, adding the QA application would cause the display filter to only apply to matching quality assurance cases.
Label <language>	Type a label.
Default	Select to make the filter the default setting.
All versions	Select if you want to apply the filter to all versions of content.  Clear to apply the filter to current versions.
DQL filter	Type the DQL query defining the filter.
Type	Select the content type to which the DQL query is applied.

4. Click **Save**.

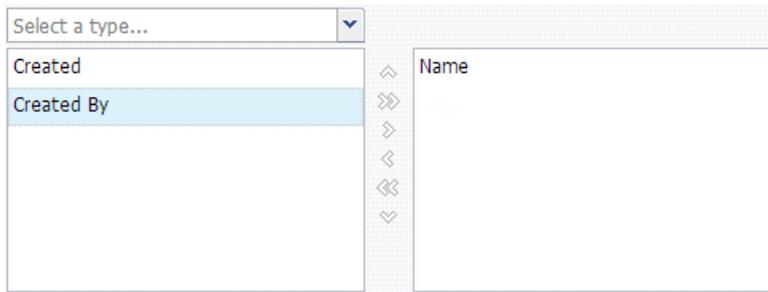
## Configuring D2 Client Column Preferences

Default columns in the repository for tables display all properties and types. You can configure column preferences to allow users to select columns that filter the table based on property and type.

For example, the following image is a `dm_folder` content type with its configured properties:



The following image is the resulting column configuration interface in D2 Client as well as the property `Title`, which shows the folder path:



1. Navigate to **Interface > Display configuration** from the menu bar.
2. Use the list controls to modify the list of columns that filter based on content type.
3. To add a property filter:
  - a. Select a type from **Properties of selected type**.
  - b. Use the list controls to modify the list of property filters.
  - c. For each property, you can select a dictionary and select an alias or language to configure the display of values within the column.

For example, you can configure a **Status** column to use the English language setting of a dictionary. Depending on dictionary configuration, values in a different language within the column can be translated into English. You can use dictionaries and aliases to universalize column value structure.

4. Click **Save**.

## Configuring Access to Administration Widgets in D2 Client

1. Navigate to **Tools > Options** from the menu bar.
2. Fill out the form as described in the following table:

Field	Description
Access group for administration node	Select the group to enable access to all administration widgets. If left blank, all groups have access.
Access group for users administration node	Select the group to enable access to the user administration widget. If left blank, all groups have access.
Access group for groups administration node	Select the group to enable access to the group administration widget. If left blank, all groups have access.
Group and user administration parent node	Select the group to enable access to user and group administration widgets. If left blank, all groups have access.

3. Click **Save**.

## Refreshing and Reloading D2

You can refresh and reload certain aspects of D2 using the Tools menu in D2 Config, as described in the following table:

Action	Description
Tools > Refresh cache	Run this task to rebuild the cache, which is an operation that is normally run when the server is restarted.
Tools > Reload D2 options	Run this task to reload D2-Config.properties. You can use this task to load the updated D2-Config.properties settings without restarting your application server.

# Configuring the Interface of D2 Client 3.1

This chapter contains the following topics:

- [Configuring Menus for D2 Client 3.1](#)
- [Configuring Toolbars for D2 Client 3.1](#)
- [Configuring Themes for D2 Client 3.1](#)
- [Configuring Treeview for D2 Client 3.1](#)

## Configuring Menus for D2 Client 3.1

D2 4.1 provides support for mixed-environment installations. You can configure the menus of D2 Client 3.1.

1. Navigate to **Go to > Menu D2-Client** from the menu bar to configure the following menus for D2 Client 3.1:
  - Locations
  - Versions
  - Renditions
  - Relations
  - Workflows
  - Snapshots
  - Details
  - Relations
  - Hyperlinks
  - Publish profiles
  - Overlays
  - Components
  - Right click
  - Right click on async search
  - New Component Template submenu
  - Right Click on Edit TOC dialog
  - Right click on P2 Manager node
  - Right click on Publish frame
  - Right click on snapshot frame

- Right click on task
- Right click on templates administration node
- Right click on task node
- Right click on last search node
- Right click on VD frame
- Right click on node that has content
- Publish Hyperlink submenu
- MenuPublishP2Import
- Propagate property submenu
- Publish Update submenu

2. Click **New** to create a menu.

If you want to create a child menu that inherits the properties of an existing menu, select a menu and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this menu applies. For example, adding the QA application would cause the menu to only apply to matching quality assurance cases.

4. You can add menu buttons as described in the following table:

Action	Description
Add separator	Add a line to partition the menu.
Add menu item	Add a menu entry.
Add sub-menu item	Add a menu as a submenu that an end user can view by expanding the parent menu entry.
Add dynamic menu item	Add a menu entry that executes a Java class.  You can only add dynamic menu items to context menus.

5. Configure menu entries:

a. Configure the appearance of the selected menu entry as described in the following table:

Field	Description
Hide this entry	Select to hide the menu item users of the specified application.
Label <language>	Type a label.

b. Configure the actions assigned to the selected menu entry as described in the following table:

Field	Description
Action	Type a Javascript action for the button to execute. <a href="#">List of Custom Actions, page 177</a> contains further information about the commands that you can use.
Sub menu	Select a menu to be shown as a submenu.  For example, selecting <code>MenuContextAdminTaxonomy</code> from the submenu list box adds the most recent version of the menu for <b>Right click on Admin Taxonomy widget</b> as a submenu.
Java class	Select the Java class to execute if the menu item is dynamic.

- c. Configure the display conditions of the selected menu entry as described in the following table:

Field	Description
Display conditions	Use display conditions to define the rules and scope of D2 shows the menu entry.  Click <b>Browse</b> to add display conditions.  Click <b>Delete</b> to remove display conditions.  Use the list controls to move conditions up and down the list.
Display disabled instead of hidden	Select whether to show the menu entry as grayed out or hide the menu entry from view.
Invert the condition	Select to invert the condition.  For example, you want to have a particular cabinet shown to everyone except for users who have the consumer role. You set the display condition <code>user has client capability equals consumer</code> and then select to invert. The display condition then changes to <code>user has not client capability equals consumer</code>

6. Drag and drop menu items to reorder.
7. Click **Save**.

## Configuring Toolbars for D2 Client 3.1

D2 Client 4.1 provides support for mixed-environment installations. You can modify the position, label, display conditions, and contents of the toolbar of D2 Client 3.1.

1. Navigate to **Go to > Toolbar** from the menu bar.
2. Click **New** to create a toolbar.

If you want to create a child toolbar that inherits the properties of an existing toolbar, select a toolbar and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this toolbar applies. For example, adding the QA application would cause the toolbar to only apply to matching quality assurance cases.

4. Configure toolbar buttons:

a. Configure the appearance and action as described in the following table:

Field	Description
Hide this entry	Select to hide the button from the toolbar.
Label <language>	Type the text of the button.
Tip <language>	Type the tooltip text for the button.
Action	Type a Javascript action for the button to execute.  <a href="#">List of Custom Actions, page 177</a> contains further information about the commands that you can use.

b. Configure the display conditions as described in the following table:

Field	Description
Display conditions	Use display conditions to define the rules and scope of D2 shows the menu entry.  Click <b>Browse</b> to add display conditions.  Click <b>Delete</b> to remove display conditions.  Use the list controls to move conditions up and down the list.
Display disabled instead of hidden	Select whether to show the menu entry as grayed out or hide the menu entry from view.
Invert the condition	Select to invert the condition.  For example, you want to have a particular cabinet shown to everyone except for users who have the consumer role. You set the display condition <code>user has client capability equals consumer</code> and then select to invert. The display condition then changes to <code>user has not client capability equals consumer</code>

5. Click **Save**.

## Configuring Themes for D2 Client 3.1

D2 Client 4.1 provides support for mixed-environment installations. You can modify the color schemes of dialog boxes, headers, menus, selections, and icons of D2 Client 3.1.

1. Navigate to **Go to > Theme** from the menu bar.
2. Click **New** to create a theme.

If you want to create a child theme that inherits the properties of an existing theme, select a theme and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this theme applies. For example, adding the QA application would cause the theme to only apply to matching quality assurance cases.

4. Configure the theme:

Item	Description
Dialog box	Select a border style, background color, and tab style.
Header	Select a color and logo.
Menu	Select a background color.
Interface	Select element and priority colors.
Icon	Select document formats and types and a corresponding icon.  Use the up and down arrows to reorder the formats and types. The order must correspond to the cascading style sheet (CSS) used for the repository, and the most import styles must be located at the bottom of the list.  The optimal size for the icon is 16*16 pixels.

5. Click **Save**.

## Configuring Treeview for D2 Client 3.1

D2 Client 4.1 provides support for mixed-environment installations. You can modify labels and add display conditions to repositories in D2 Client 3.1.

1. Navigate to **Go to > Treeview** from the menu bar.
2. Click **New** to create a treeview.

If you want to create a child treeview that inherits the properties of an existing treeview, select a treeview and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

EMC Documentum

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this treeview applies. For example, adding the QA application would cause the treeview to only apply to matching quality assurance cases.

4. Select a node in the treeview and fill out the fields as described in the following table:

Field	Description
Label <i>&lt;language&gt;</i>	Type a label.
Hide this node	Select to hide the node from users of the selected application.
Display conditions	Use display conditions to define the rules and scope of when a node is shown.  Click <b>Browse</b> to add display conditions.  Click <b>Delete</b> to remove display conditions.  Use the list controls to move conditions up and down the list.
Invert the condition	Select to invert the condition.  For example, you want to have a particular cabinet shown to everyone except for users who have the consumer role. You set the display condition <code>user has client capability equals consumer</code> and then select to invert. The display condition then changes to <code>user has not client capability equals consumer</code>

5. Click **Save**.

## D2 Config Troubleshooting and Tips

This chapter contains the following topics:

- **Accessing D2 Config without Opening a New Browser Window**

### Accessing D2 Config without Opening a New Browser Window

If you do not want to open D2 Config in a new browser window, add the `newWindow` parameter to the D2 Config URL and set it to `false`. For example:

```
http://<web application server URL>:8080/D2-Config/?newWindow=false
```



## Configuring C2

This chapter contains the following topics:

- **Overview of C2**
- **Configuring a Dynamic View Configuration**
- **Configuring a Dynamic Print Configuration**
- **Configuring a Dynamic Export Configuration**
- **Configuring a Static Configuration**
- **Formatting C2 Table of Contents using XSL**
- **Configuring C2 Administrator Access**
- **Clearing the dmi\_queue\_item After Creating a C2 Rendition**

## Overview of C2

Use C2 to extend PDF functionality of D2 with regards to adding:

- **Extra pages:** you can add one or several pages at the beginning, end, or after a given page. These pages can contain content properties or variables.
- **PDF layers:** you can add headers, footers, or images to all or part of documents.
- **Watermarks:** you can add image or text watermarks to all or part of documents above or below text and as transparent images.
- **Dynamic pages:** you can add dynamically-constructed pages, such as signature pages, gradually over the course of the lifecycle of the PDF document. Create dynamic pages in XML format so that tables can be managed based on their size, which are linked according to configurations when the document is viewed, printed, or exported.

Changes are applied to the PDF document as according to four configurations: view, print, export, and static conversion. Use static conversion to configure an actions that cannot be changed and is carried out once during processing. Static conversions overwrite the current rendition or create a new rendition. Toggle C2 configurations to contexts for end users the same way you configure and enable D2 configuration components. If you enable a C2 View configuration, D2 always uses the C2 view instead of the default D2 view.

You can use C2 to secure and apply controls to PDF documents when they are distributed out of the repository. The main functions are:

- Ensuring only secure versions are provided when viewing, exporting, and printing.
- Controlling printing using print counters and adding the ability to print with the note designating the recipient. D2 audits the controlled prints using the information provided by the end user when submitting the content for printing.

- Controlling PDF security settings, such as setting passwords for opening the file, applying encryption, and removal of save and print functions.

## Configuring a Dynamic View Configuration

- Navigate to **C2 > View configuration** from the menu bar.
- Click **New** to create a view configuration.

If you want to create a child view configuration that inherits the properties of an existing view configuration, select a view configuration and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

- Fill out the form as described in the following table:

Field	Description
Name	Select a view configuration.
Description	Type a description.
Applications	Add or remove the applications to which this view configuration applies. For example, adding the QA application would cause the view configuration to only apply to matching quality assurance cases.
Default configuration	Select to make this configuration the default view configuration.  If more than one default configuration is applicable for the end user in a context within the configuration matrix, D2 uses the top-most configuration in the C2 View Configuration page.
Compatibility	Select the oldest compatible version of the PDF viewing software.
Full compression	If you are using Acrobat 6.0 or later, select the option to compress the view configuration.
Label <language>	Type a label.
Input format	Select a rendition to use if no C2 rendition configuration is applied to the content.

- To configure the list of properties of the content, select the **Properties** tab:
  - Select a property from **Properties** or from the list of added properties.
  - If you want to apply a dictionary to the property, select a dictionary from **Dictionaries** and optionally an alias or language.
  - Click **Insert** to add the property.
- To configure the security parameters of the content, select the **Protection** tab:
  - Fill out the fields as described in the following table:

Field	Description
Encryption level	Select to use either 40 or 128 bit encryption levels.
User password	Set a password for opening the PDF.
Password to modify preference	Set a password for modifying the PDF.

- b. Select **Allow printing**, **Allow modify content**, **Allow copy**, or **Allow modify annotations** to allow the user to perform the respective actions.
6. To configure the default viewing settings, select the **Initial View** tab:
- a. Fill out the fields as described in the following table:

Field	Description
Page Layout	Select the page layout.
Display	Select the display mode.
Displayed page on running	Select the page number to show when the content is opened.

- b. Configure the window by selecting or clearing **Resize from init page**, **Center on the screen**, and **Open with fullscreen mode**.
- c. Configure the user interface by selecting or clearing **Hide Tool bar**, **Hide menu bar**, and **Hide Windows UI**.
7. To merge files into the current content:
- a. To insert a table of contents, click **Insert table of content** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Import an XSL for formatting the table of contents XML generated by D2.  <a href="#">Formatting C2 Table of Contents using XSL, page 149</a> contains further information about the values to map.
Bookmark label	Type a label.
Table of content's max depth	Select the number of levels used by the table of contents.
Separator type	Select the type of separator used between the title of a section and the page number.

- b. To insert a blank page, click **Insert blank page** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
Landscape orientation	Select to flip the page to be horizontally oriented.
Only if it's a even page	Select if the page is a blank page that users only view when it falls on an even page.

- c. To insert a PDF file, click **Insert PDF** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .

Field	Description
Bookmark label	Type a label.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

- d. To insert an XSL file, click **Insert XSL** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .
Bookmark label	Type a label.
Properties	Click to open the <b>C2 Xsl file property</b> dialog box. You can add, remove, and reorder DQL queries for modifying the properties of the XSL file.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

- e. Use the list controls to reorder merged files.

8. To add stamping to the content:

- a. To add an image watermark, click **Insert image watermark**. Select an image from the list box or click **New** to open a dialog box for adding an image. Type a name for the file, click **Browse** to select a file, then select a **Format** from the list box, and click **OK**.

Click **Properties** to view and edit the properties of the watermark.

- b. To add a text watermark, click **Insert text watermark**. Select a watermark from the list box or click **New** to open the **C2 watermark properties** dialog box. Fill out the form as described in the following table:

Field	Description
Name	Type a name.
Text	Type the text for the watermark. You can use the following variables: <ul style="list-style-type: none"> <li>• <code>\$value()</code> to use properties and optionally dictionaries. For example, use <code>\$value(a_status)</code> to show the status of content.</li> <li>• <code>\$dqlvalue()</code> to use a DQL query. For example, use <code>\$dqlvalue("select a_status from dm_document where r_object_id=' \$value(r_object_id) '")</code> to show the status of the specified content.</li> </ul>
Font name	Select a font from the list box.
Font size	Select or type a font size.
Font color	Select a font color.
Horizontal align	Select the horizontal alignment.

Field	Description
Vertical align	Select the vertical alignment.
Opacity	Select the opacity.
Rotation	Select the rotation.

You can click **Properties** to view and edit the properties of the watermark.

- c. To add a PDF layer, click **Insert PDF layer**. Select a file from the list box or click **Browse** to open a dialog box for adding a file. Type a name for the file, click **Browse** to select a file, then select a **Format** from the list box, and click **OK**.

You can use a PDF document to add dynamic image watermarking. The PDF document you add as a PDF layer must contain a text field that uses the `$image ()` variable to refer to an image.

For example, if you store images named after content status in the `/System/Images/` folder, type the following line in the text field:

```
$image (/System/Images/$value (a_status) .jpg)
```

- d. You can click **Preview** to preview the look of the watermark.

Watermarks that use a PDF layer and a variable do not show up in the preview.

- e. Fill out the form as described in the following table:

Field	Description
Applicated on	Select the scope of pages you want to apply the watermarks.
From	Select the first bookmark.
to page	Select the last bookmark.
Apply on top of content	Select to place the watermark over the text. By default, watermarks are placed below the text.

9. To configure the document content:

- a. To insert a blank page, click **Insert blank page** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
Landscape orientation	Select to flip the page to be horizontally oriented.
Only if it's a even page	Select if the page is a blank page that users only view when it falls on an even page.

- b. To insert a PDF file, click **Insert PDF** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .

Field	Description
Bookmark label	Type a label.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

c. To insert an XSL file, click **Insert XSL** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .
Bookmark label	Type a label.
Properties	Click to open the <b>C2 Xsl file property</b> dialog box. You can add, remove, and reorder DQL queries for modifying the properties of the XSL file.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

d. To delete a page, click **Delete a document content page**, then type the page number of the page to delete.

e. Use the list controls to reorder document content.

10. Click **Save**.

## Configuring a Dynamic Print Configuration

1. Navigate to **C2 > Print configuration** from the menu bar.

2. Click **New** to create a print configuration.

If you want to create a child print configuration that inherits the properties of an existing print configuration, select a print configuration and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Select a print configuration.
Description	Type a description.
Default configuration	Select to make this configuration the default print configuration.  If you enable more than one default configuration in the configuration matrix, D2 prioritizes top-to-bottom among the configurations labeled as default.
Compatibility	Select the oldest compatible version of the PDF viewing software.

Field	Description
Label <language>	Type a label.
Input format (will be used only if there is no C2 rendition configuration applied on document)	Select a file format.

4. Configure the form for end users to fill out as described in the following table:

Field	Description
Field number <number>	Select to enable and configure the field in the controlled printing dialog box for D2 Client.
Label <language>	Type a label.
Assistance type	Select the input mode for entering the reason for printing. <ul style="list-style-type: none"> <li>• Free text: the user types the reason.</li> <li>• DQL: type a query to provide the user with a dynamic list of values.</li> <li>• Dictionary: select a dictionary for a static list of values.</li> </ul>

End users are required to fill out these fields when they print through C2. The information typed into the field is stored and shown with the D2 audit for the controlled print.

The **Field n°1** field corresponds to the list of recipients. End users can type a list of users in this field during controlled print. The **Recipient** field in the recall print dialog for D2 Client functions as a list box of users entered in **Field n°1**.

5. To merge files into the current content:
- To insert a table of contents, click **Insert table of content** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Import an XSL for formatting the table of contents XML generated by D2.  <a href="#">Formatting C2 Table of Contents using XSL, page 149</a> contains further information about the values to map.
Bookmark label	Type a label.
Table of content's max depth	Select the number of levels used by the table of contents.
Separator type	Select the type of separator used between the title of a section and the page number.

- To insert a blank page, click **Insert blank page** and fill out the form as described in the following table:

Field	Description
Name	Type a name.

Field	Description
Landscape orientation	Select to flip the page to be horizontally oriented.
Only if it's a even page	Select if the page is a blank page that users only view when it falls on an even page.

- c. To insert a PDF file, click **Insert PDF** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .
Bookmark label	Type a label.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

- d. To insert an XSL file, click **Insert XSL** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .
Bookmark label	Type a label.
Properties	Click to open the <b>C2 Xsl file property</b> dialog box. You can add, remove, and reorder DQL queries for modifying the properties of the XSL file.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

- e. Use the list controls to reorder merged files.

6. To add stamping to the content:

- a. To add an image watermark, click **Insert image watermark**. Select an image from the list box or click **New** to open a dialog box for adding an image. Type a name for the file, click **Browse** to select a file, then select a **Format** from the list box, and click **OK**.

You can click **Properties** to view and edit the properties of the watermark.

- b. To add a text watermark, click **Insert text watermark**. Select a watermark from the list box or click **New** to open the **C2 watermark properties** dialog box. Fill out the form as described in the following table:

Field	Description
Name	Type a name.

Field	Description
Text	Type the text for the watermark. You can use the following variables: <ul style="list-style-type: none"> <li>• <code>\$value()</code> to use properties and optionally dictionaries. For example, use <code>\$value(a_status)</code> to show the status of content.</li> <li>• <code>\$dqlvalue()</code> to use a DQL query. For example, use <code>\$dqlvalue("select a_status from dm_document where r_object_id=' \$value(r_object_id) '")</code> to show the status of the specified content.</li> </ul>
Font name	Select a font from the list box.
Font size	Select or type a font size.
Font color	Select a font color.
Horizontal align	Select the horizontal alignment.
Vertical align	Select the vertical alignment.
Opacity	Select the opacity.
Rotation	Select the rotation.

Click **Properties** to view and edit the properties of the watermark.

- c. To add a PDF layer, click **Insert PDF layer**. Select a file from the list box or click **Browse** to open a dialog box for adding a file. Type a name for the file, click **Browse** to select a file, then select a **Format** from the list box, and click **OK**.

You can use a PDF document to add dynamic image watermarking. The PDF document you add as a PDF layer must contain a text field that uses the `$image()` variable to refer to an image.

For example, if you store images named after content status in the `/System/Images/` folder, type the following line in the text field:

```
$image(/System/Images/$value(a_status).jpg)
```

- d. You can click **Preview** to preview the look of the watermark.

Watermarks that use a PDF layer and a variable do not show up in the preview.

- e. Fill out the form as described in the following table:

Field	Description
Applicated on	Select the scope of pages you want to apply the watermarks.
From	Select the first bookmark.
to page	Select the last bookmark.
Apply on top of content	Select to place the watermark over the text. By default, watermarks are placed below the text.

- a. To insert a blank page, click **Insert blank page** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
Landscape orientation	Select to flip the page to be horizontally oriented.
Only if it's a even page	Select if the page is a blank page that users only view when it falls on an even page.

- b. To insert a PDF file, click **Insert PDF** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .
Bookmark label	Type a label.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

- c. To insert an XSL file, click **Insert XSL** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .
Bookmark label	Type a label.
Properties	Click to open the <b>C2 Xsl file property</b> dialog box. You can add, remove, and reorder DQL queries for modifying the properties of the XSL file.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

- d. To delete a page, click **Delete a document content page**, then type the page number of the page to delete.
- e. Use the list controls to reorder document content.
8. Click **Save**.

## Configuring a Dynamic Export Configuration

1. Navigate to **C2 > Export configuration** from the menu bar.
2. Click **New** to create an export configuration.

If you want to create a child export configuration that inherits the properties of an existing export configuration, select an export configuration and click **Create from**. [Understanding Parent and Child Configurations, page 16](#) contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Select a export configuration.
Description	Type a description.
Applications	Add or remove the applications to which this export configuration applies. For example, adding the QA application would cause the export configuration to only apply to matching quality assurance cases.
Default configuration	Select to make this configuration the default export configuration.  If you enable more than one default configuration in the configuration matrix, D2 prioritizes top-to-bottom among the configurations labeled as default.
Compatibility	Select the oldest compatible version of the PDF viewing software.
Full compression	If you are using Acrobat 6.0 or later, select the option to compress the export configuration.
Label <language>	Type a label that shows in the D2 interface.
Input format	Select the file format used when exporting content.

4. To configure the list of properties of the content, select the **Properties** tab:
  - a. Select a property from **Properties** or from the list of added properties.
  - b. If you want to apply a dictionary to the property, select a dictionary from **Dictionaries** and optionally an alias or language.
  - c. Click **Insert** to add the property.
5. To configure the security parameters of the content, select the **Protection** tab:
  - a. Fill out the fields as described in the following table:

Field	Description
Encryption level	Select to use either 40 or 128 bit encryption levels.
User password	Set a password for opening the PDF.
Password to modify preference	Set a password for modifying the PDF.

- b. Select **Allow printing**, **Allow modify content**, **Allow copy**, or **Allow modify annotations** to allow the user to perform the respective actions.
6. To configure the default viewing settings, select the **Initial View** tab:
  - a. Fill out the fields as described in the following table:

Field	Description
Page Layout	Select the page layout.
Display	Select the display mode.
Displayed page on running	Select the page number that appears when the content is opened.

- b. Configure the window by selecting or clearing **Resize from init page**, **Center on the screen**, and **Open with fullscreen mode**.

- c. Configure the user interface by selecting or clearing **Hide Tool bar**, **Hide menu bar**, and **Hide Windows UI**.
7. To merge files into the current content:
- a. To insert a table of contents, click **Insert table of content** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Import an XSL for formatting the table of contents XML generated by D2.  <a href="#">Formatting C2 Table of Contents using XSL, page 149</a> contains further information about the values to map.
Bookmark label	Type a label.
Table of content's max depth	Select the number of levels used by the table of contents.
Separator type	Select the type of separator used between the title of a section and the page number.

- b. To insert a blank page, click **Insert blank page** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
Landscape orientation	Select to flip the page to be horizontally oriented.
Only if it's a even page	Select if the page is a blank page that users only view when it falls on an even page.

- c. To insert a PDF file, click **Insert PDF** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .
Bookmark label	Type a label.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

- d. To insert an XSL file, click **Insert XSL** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .
Bookmark label	Type a label.

Field	Description
Properties	Click to open the <b>C2 Xsl file property</b> dialog box. You can add, remove, and reorder DQL queries for modifying the properties of the XSL file.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

- e. Use the list controls to reorder merged files.
8. To add stamping to the content:
- a. To add an image watermark, click **Insert image watermark**. Select an image from the list box or click **New** to open a dialog box for adding an image. Type a name for the file, click **Browse** to select a file, then select a **Format** from the list box, and click **OK**.

Click **Properties** to view and edit the properties of the watermark.

- b. To add a text watermark, click **Insert text watermark**. Select a watermark from the list box or click **New** to open the **C2 watermark properties** dialog box. Fill out the form as described in the following table:

Field	Description
Name	Type a name.
Text	Type the text for the watermark. You can use the following variables: <ul style="list-style-type: none"> <li>• <code>\$value()</code> to use properties and optionally dictionaries. For example, use <code>\$value(a_status)</code> to show the status of content.</li> <li>• <code>\$dqlvalue()</code> to use a DQL query. For example, use <code>\$dqlvalue("select a_status from dm_document where r_object_id=' \$value(r_object_id) '")</code> to show the status of the specified content.</li> </ul>
Font name	Select a font from the list box.
Font size	Select or type a font size.
Font color	Select a font color.
Horizontal align	Select the horizontal alignment.
Vertical align	Select the vertical alignment.
Opacity	Select the opacity.
Rotation	Select the rotation.

You can click **Properties** to view and edit the properties of the watermark.

- c. To add a PDF layer, click **Insert PDF layer**. Select a file from the list box or click **Browse** to open a dialog box for adding a file. Type a name for the file, click **Browse** to select a file, then select a **Format** from the list box, and click **OK**.

You can use a PDF document to add dynamic image watermarking. The PDF document you add as a PDF layer must contain a text field that uses the `$image()` variable to refer to an image.

For example, if you store images named after content status in the /System/Images/ folder, type the following line in the text field:

```
$image (/System/Images/$value (a_status) .jpg)
```

- d. You can click **Preview** to preview the look of the watermark.

Watermarks that use a PDF layer and a variable do not show up in the preview.

- e. Fill out the form as described in the following table:

Field	Description
Applicated on	Select the scope of pages you want to apply the watermarks.
From	Select the first bookmark.
to page	Select the last bookmark.
Apply on top of content	Select to place the watermark over the text. By default, watermarks are placed below the text.

- 9. To configure the document content:

- a. To insert a blank page, click **Insert blank page** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
Landscape orientation	Select to flip the page to be horizontally oriented.
Only if it's a even page	Select if the page is a blank page that users only view when it falls on an even page.

- b. To insert a PDF file, click **Insert PDF** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .
Bookmark label	Type a label.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

- c. To insert an XSL file, click **Insert XSL** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .
Bookmark label	Type a label.

Field	Description
Properties	Click to open the <b>C2 Xsl file property</b> dialog box. You can add, remove, and reorder DQL queries for modifying the properties of the XSL file.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

- d. To delete a page, click **Delete a document content page**, then type the page number of the page to delete.
- e. Use the list controls to reorder document content.

10. Click **Save**.

## Configuring a Static Configuration

1. Navigate to **C2 > Rendition configuration** from the menu bar.
2. Click **New** to create a static configuration.

If you want to create a child static configuration that inherits the properties of an existing static configuration, select a static configuration and click **Create from**. [Understanding Parent and Child Configurations](#), page 16 contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Select a print configuration.
Description	Type a description.
Compatibility	Select the oldest compatible version of the PDF viewing software.

4. Select an **Input rendition format** and an **Output rendition format** from the list boxes. For example, you can select **Acrobat PDF** and **C2 PDF Rendition**, respectively, to create a configuration that converts Acrobat PDF to C2 PDF.
5. To configure the list of properties of the content, select the **Properties** tab:
  - a. Select a property from **Properties** or from the list of added properties.
  - b. If you want to apply a dictionary to the property, select a dictionary from **Dictionaries** and optionally an alias or language.
  - c. Click **Insert** to add the property.
6. To configure the security parameters of the content, select the **Protection** tab:
  - a. Fill out the fields as described in the following table:

Field	Description
Encryption level	Select to use either 40 or 128 bit encryption levels.
User password	Set a password for opening the PDF.
Password to modify preference	Set a password for modifying the PDF.

- b. Select **Allow printing**, **Allow modify content**, **Allow copy**, or **Allow modify annotations** to allow the user to perform the respective actions.
7. To configure the default viewing settings, select the **Initial View** tab:

- a. Fill out the fields as described in the following table:

Field	Description
Page Layout	Select the page layout.
Display	Select the display mode.
Displayed page on running	Select the page number that appears when the content is opened.

- b. Configure the window by selecting or clearing **Resize from init page**, **Center on the screen**, and **Open with fullscreen mode**.
- c. Configure the user interface by selecting or clearing **Hide Tool bar**, **Hide menu bar**, and **Hide Windows UI**.
8. To merge files into the current content:

- a. To insert a table of contents, click **Insert table of content** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Import an XSL for formatting the table of contents XML generated by D2.  <a href="#">Formatting C2 Table of Contents using XSL, page 149</a> contains further information about the values to map.
Bookmark label	Type a label.
Table of content's max depth	Select the number of levels used by the table of contents.
Separator type	Select the type of separator used between the title of a section and the page number.

- b. To insert a blank page, click **Insert blank page** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
Landscape orientation	Select to flip the page to be horizontally oriented.
Only if it's a even page	Select if the page is a blank page that users only view when it falls on an even page.

- c. To insert a PDF file, click **Insert PDF** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .
Bookmark label	Type a label.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

- d. To insert an XSL file, click **Insert XSL** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .
Bookmark label	Type a label.
Properties	Click to open the <b>C2 Xsl file property</b> dialog box. You can add, remove, and reorder DQL queries for modifying the properties of the XSL file.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

- e. Use the list controls to reorder merged files.
9. To add stamping to the content:
- a. To add an image watermark, click **Insert image watermark**. Select an image from the list box or click **New** to open a dialog box for adding an image. Type a name for the file, click **Browse** to select a file, then select a **Format** from the list box, and click **OK**.

You can click **Properties** to view and edit the properties of the watermark.

- b. To add a text watermark, click **Insert text watermark**. Select a watermark from the list box or click **New** to open the **C2 watermark properties** dialog box. Fill out the form as described in the following table:

Field	Description
Name	Type a name.
Text	Type the text for the watermark. You can use the following variables: <ul style="list-style-type: none"> <li>• <code>\$value()</code> to use properties and optionally dictionaries. For example, use <code>\$value(a_status)</code> to show the status of content.</li> <li>• <code>\$dqlvalue()</code> to use a DQL query. For example, use <code>\$dqlvalue("select a_status from dm_document where r_object_id=' \$value(r_object_id) '")</code> to show the status of the specified content.</li> </ul>
Font name	Select a font from the list box.
Font size	Select or type a font size.
Font color	Select a font color.
Horizontal align	Select the horizontal alignment.
Vertical align	Select the vertical alignment.
Opacity	Select the opacity.
Rotation	Select the rotation.

Click **Properties** to view and edit the properties of the watermark.

- c. To add a PDF layer, click **Insert PDF layer**. Select a file from the list box or click **Browse** to open a dialog box for adding a file. Type a name for the file, click **Browse** to select a file, then select a **Format** from the list box, and click **OK**.

You can use a PDF document to add dynamic image watermarking. The PDF document you add as a PDF layer must contain a text field that uses the `$image()` variable to refer to an image.

For example, if you store images named after content status in the `/System/Images/` folder, type the following line in the text field:

```
$image(/System/Images/$value(a_status).jpg)
```

- d. You can click **Preview** to preview the look of the watermark.

Watermarks that use a PDF layer and a variable do not show up in the preview.

- e. Fill out the form as described in the following table:

Field	Description
Applicated on	Select the scope of pages you want to apply the watermarks.
From	Select the first bookmark.
to page	Select the last bookmark.
Apply on top of content	Select to place the watermark over the text. By default, watermarks are placed below the text.

- 10. To configure the document content:

- a. To insert a blank page, click **Insert blank page** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
Landscape orientation	Select to flip the page to be horizontally oriented.
Only if it's a even page	Select if the page is a blank page that users only view when it falls on an even page.

- b. To insert a PDF file, click **Insert PDF** and fill out the form as described in the following table:

Field	Description
Name	Type a name.
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .
Bookmark label	Type a label.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

- c. To insert an XSL file, click **Insert XSL** and fill out the form as described in the following table:

Field	Description
Name	Type a name.

Field	Description
File	Select a file from the list box or click <b>Browse</b> , type a name for the file, click <b>Browse</b> to select a file, then select a <b>Format</b> from the list box, and click <b>OK</b> .
Bookmark label	Type a label.
Properties	Click to open the <b>C2 Xsl file property</b> dialog box. You can add, remove, and reorder DQL queries for modifying the properties of the XSL file.
Include bookmarks contained in the pdf	Select to add the contained bookmarks to the list.

- d. To delete a page, click **Delete a document content page**, then type the page number of the page to delete.
- e. Use the list controls to reorder document content.

11. Click **Save**.

## Formatting C2 Table of Contents using XSL

D2 automatically generates an XML containing the elements of the table of contents. Create and import an XSL for formatting the table of contents when viewing, printing, or exporting content in C2.

The XML uses parameters within an `object` in the `root` as described in the following table:

Parameter	Description
depth	The depth is a numeric value indicating the number of indentations preceding the element in the table of contents. For example, <code>&lt;depth&gt;0&lt;/depth&gt;</code> corresponds to 0 indentations, while <code>&lt;depth&gt;1&lt;/depth&gt;</code> corresponds to a single indentation.
action	The action indicates the type of link being used by the element in the table of contents. Use <code>GOTO</code> to have the table of contents send the reader to the element when the link is clicked.
title	The title is the label shown for the element in the table of contents.
page	The page is the page number.

## Configuring C2 Administrator Access

You can configure the group of users given access to changing C2 settings using D2 Config.

1. Navigate to **Tools > Options** from the menu bar.
2. Click the **C2 Options** tab.
3. Select or type a group to set as the C2 Administrator group.

4. Click **Save**.

## Clearing the `dmi_queue_item` After Creating a C2 Rendition

The C2 plug-in creates a `c2_rendition` event in the `dmi_queue_item` queue to generate the PDF rendition. After completing the request and generating the PDF, D2 marks the item as dequeued but does not clear the `dmi_queue_item` events.

To remove the queue items you must either:

- Use the queue management tool to remove the queue item.

The queue management tool is installed out-of-the-box in an inactive state. The *EMC Documentum Content Server Administration and Configuration Guide* contains more information about the queue management tool.

- Delete the queue items using the `DELETE . . . OBJECT` DQL query. For example, to remove all queue objects representing objects that were dequeued before January 1, 2013:

```
DELETE "dmi_queue_item" OBJECTS WHERE "dequeued_date" <
DATE('01/01/2013') AND "delete_flag" = true
```

## Configuring O2

This chapter contains the following topics:

- [Configuring the O2 Transfer Configuration in D2](#)
- [Configuring File Formats Recognized by O2](#)
- [Configuring Microsoft Office for O2](#)

## Configuring the O2 Transfer Configuration in D2

Use O2 to allow management of properties transfer between D2 and Microsoft Office documents as well as between .eml and .msg email messages.

1. Navigate to **O2 > Transfer configuration** from the menu bar.
2. Click **New** to create an O2 transfer configuration.

If you want to create a child O2 transfer configuration that inherits the properties of an existing O2 transfer configuration, select an O2 transfer configuration and click **Create from**. [Understanding Parent and Child Configurations](#), page 16 contains more information on child configurations.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix.
Description	Type a description.
Applications	Add or remove the applications to which this transfer configuration applies. For example, adding the QA application would cause the transfer configuration to only apply to matching quality assurance cases.
Format of “date” property type	Type a date format using dd for date, MM for month, and yy for the last two digits of the year.
Trigger events	Use the list controls to add and remove the events that trigger properties transfer. If the list is empty, O2 is activated on all events except view and check out.

4. Configure properties to transfer:
  - a. Use the list controls to add or remove properties.

Content imported in D2 Client with an associated O2 configuration inherits the selected properties.

- b. Fill out the form as described in the following table:

EMC Documentum

Field	Description
Documentum property	Type the Documentum name of the property.
Office property	Type the Microsoft Office name of the property.
Relation direction	Select the direction of the property transfer.  Do not use a bidirectional relationship with repeating properties.
Dictionary	Select a dictionary to use a dictionary.
Alias/Locale	Select an alias or locale to specify the dictionary being used.

5. Configure DQL queries to use in the Microsoft Office document:
  - a. Use the list controls to add or remove DQL queries.
  - b. Fill out the form as described in the following table:

Field	Description
DQL query identifier	Type a name.
DQL query	Type a DQL query.

6. Click **Save**.

## Configuring File Formats Recognized by O2

1. Navigate to **Tools > Options** from the menu bar.
2. Click the **O2 Options** tab.
3. Use the list controls to add and remove file formats recognized by O2.
4. Click **Save**.

## Configuring Microsoft Office for O2

Perform the following steps on all end user machines. Refer to the documentation for the Microsoft Office products for detailed instructions on creating and enabling a macro, setting trusted locations, and adding properties.

1. Create a macro and enter the following set of code:

```
Sub AutoOpen()

    Dim aStory As Range
    Dim aField As Field

    For Each aStory In ActiveDocument.StoryRanges
        For Each aField In aStory.Fields
            aField.Update
        Next aField
    Next aStory

    ActiveDocument.Saved = True
```

End Sub

2. In the Microsoft Office configurations:
  - a. Enable the macro.
  - b. Add the D2 repository view and checkout folders used by end users to the **Trusted Locations** list.
3. Create the properties in Microsoft Word, Excel, and Powerpoint to allow O2 to transfer property information.
4. To update the values of inserted properties in Microsoft Word, right-click the properties and select **Update fields**.

If you cannot update the fields, make sure **Update fields** is enabled in the Microsoft Word configurations.



## Using D2 Specs

This chapter contains the following topics:

- [Configuring D2 Specs Module Descriptions](#)
- [Generating a Specifications Document](#)

### Configuring D2 Specs Module Descriptions

You can modify the descriptions of D2 modules. D2 Specs uses the descriptions when generating a specification document of your D2 configuration.

1. Navigate to **Tools > Modules description** from the menu bar.
2. Type a description for modules used.
3. Click **Save**.

### Generating a Specifications Document

1. Navigate to **Specifications > Generate configurations** from the menu bar.
2. Fill out the form as described in the following table:

Field	Description
Applications	Select the application for which the specification is generated.
Display elements without application	Select to display configuration components that are not assigned to applications.
Include dictionaries	Select to include dictionaries.
Include taxonomies	Select to include taxonomies.
Include registered tables	Select to include registered tables.

3. Click **OK**.



## Using D2 Retention Policy Services (RPS)

This chapter contains the following topics:

- [Understanding the D2 RPS Plug-In](#)
- [Adding Documentum RPS Policies to the Configuration Matrix](#)

### Understanding the D2 RPS Plug-In

The D2 RPS plug-in adds two modules to the configuration matrix to allow you to manage and use retention and markup policies in D2 lifecycles:

- Retention policy configuration: Allows management of the preservation of repository content.
- Retention markup: Allows usage of Documentum RPS markup policies.

To use retention policies in D2, configure policies using Documentum Retention Policy Services. *EMC Documentum Records Client Administration and User Guide* contains further information. In D2, apply the retention or markup policies you create to contexts in the configuration matrix. You can then use the policies in a D2 lifecycle using the `D2ApplyRetentionMethod` and `D2ApplyMarkupMethod` methods.

### Adding Documentum RPS Policies to the Configuration Matrix

1. Navigate to:
  - **D2-RPS > Retention policy** from the menu bar for retention policies.
  - **D2-RPS > Retention markup** from the menu bar for markup policies.
2. Fill out the form as described in the following table:

Field	Description
Name	Select the policy that was configured in Documentum RPS.
Description	Type a description.
Application	Add or remove the applications to which this document link applies. For example, adding the QA application would cause the policy to only apply to matching quality assurance cases.

3. Click **Save**.



## Using D2-Bin

This chapter contains the following topics:

- [Configuring D2-Bin](#)
- [Incorrect Properties for Content in the Recycle Bin](#)

## Configuring D2-Bin

The D2-Bin plug-in adds a recycling-bin approach to managing document removal in D2. If D2-Bin is:

- Not installed, D2 permanently removes content when an end user deletes content.
- Installed, D2 moves deleted content to an electronic recycling bin, which allows end users and functional administrators to view, permanently remove, and restore content.

1. Navigate to **D2-Bin > Options** from the menu bar.
2. Fill out the form as described in the following table:

Field	Description
Group allowed to administrate every recycle bin	Select the user group to have administrative privileges for the Recycle Bin widget.
Users can destroy documents located in their own recycle bin	Select to allow users to permanently remove content in their own recycle bin.
Send an email warning when the global size of the recycle bin is more than <i>&lt;value&gt;</i> MB	Type megabyte value. When the combined size of all user recycle bins becomes larger than the input size, D2 sends an email warning.
Send an email warning when the size of a user recycle bin is more than <i>&lt;value&gt;</i> MB	Type a megabyte value. When the size of any individual user recycle bin becomes larger than the input size, D2 sends an email warning.
Send email warning to	Select the user group to which D2 sends the email warnings.

3. Click **Save**.
- EMC Documentum

## Incorrect Properties for Content in the Recycle Bin

Due to the way the repository handles content in the recycle bin, D2 shows incorrect values for the following properties:

- `a_content_type`
- `i_chronicle_id`
- `i_contents_id`
- `i_antecedent_id`
- `i_direct_dsc`
- `i_latest_flag`
- `i_vstamp`
- `i_folder_id`
- `r_folder_path`
- `r_version_label` - The value for `r_version_label` shows the correct version but also incorrectly labels the content in the recycle bin as the `CURRENT` version.
- `r_link_cnt`
- `r_modifier`
- `r_modify_date`
- `r_page_cnt`
- `r_content_size`
- `r_full_content_size`
- `r_immutable_flag`

## Optimizing D2

This chapter contains the following topics:

- **Optimizing Content Import**
- **Optimizing Property Pages**
- **Optimizing Searches**
- **Optimizing Workspaces**

## Optimizing Content Import

You can configure D2 to execute actions, such as a lifecycle action, during content import. Enabling **Execute actions on start** increases the back-end processing to complete the transaction and the complexity of the actions further impacts the processing time. To prevent unnecessary performance overhead, enable **Execute actions on start** for a configuration only if the actions are required.

## Optimizing Property Pages

Select **Load asynchronously** when configuring property pages that contain combo or list fields that perform a DQL query. When the option is enabled, D2 executes the DQL when the end user selects the specific property instead of when the property page is loaded. D2 does not need to perform the DQL query when loading a property page because the query is not necessary when the end user is viewing instead of editing. Avoiding unnecessary DQL queries improves the response time for displaying the property page and reduces the load on the Content Server and the database.

If you use an asynchronous DQL query:

- Use the `$value(filter)` wildcard to enable filtering. If you do not use the wildcard, the query returns all values when an end user selects a list box.
- Limit the returned result set by using the `enable (return_top <number of results>)` keyword. To use this keyword, set the `return_top_results_row_based` parameter in the Content Server `server.ini` file to `F`.

The response time for loading a property page depends on the number of components on the property page. Take advantage of contexts to create and configure targeted property page definitions instead of a single comprehensive property page.

## Optimizing Searches

Use the following guidelines to optimize performance of searches:

- Use a full-text search engine such as Documentum xPlore in a large-scale environment because by default the search operations use DQL queries, which may be inefficient on large data sets.
- You can create function-based indexes to improve search performance, but it is difficult to predict the attributes that D2 uses for case insensitive searches. Each additional function-based index consumes additional storage and can cause space issues.
- Set the **Maximum results returned by search** to a smaller value in the Global search configuration page to reduce the impact of searches with a large number of results.
- Query form searches do not use the **Maximum results returned by search** value nor the `dfc.search.max_results` parameters in `dfc.properties`. Make sure to design the DQL query for query forms to be more selected or use the `enable (return_top <number of results>)` keyword to limit the returned result set and reduce performance overhead.

### ***Asynchronous Searches for D2 3.1***

Asynchronous searches can cause high memory strain on the web application server because they are saved to memory. Use the following guidelines to optimize saved asynchronous searches:

- Limit DQL queries by adding the parameter `enable (RETURN_TOP 100)`
- Set **Maximum number of asynchronous searches in a user session** to limit the maximum number of asynchronous searches that end users can perform.

## Optimizing Workspaces

The number of widgets displayed on a web page can affect response time, particularly in WAN conditions with low latency. Construct workspaces focused on specific tasks instead of a comprehensive workspace for all possible scenarios.

When configuring a workspace, note that widgets on a workspace do not share query results. For example, if a workspace contains both a Doclist widget and a Searches widget, running an Advanced Search with facets triggers the same full-text query twice: one to update the result list in the Doclist widget and one to update the facet tree in the Searches widget. In a high workload scenario, this uses more search engine resources.

## Formatting Date and Time

This chapter contains the following topics:

- **Understanding Date Formats**

### Understanding Date Formats

You can configure date and time formats by changing their pattern strings. D2 interprets unquoted letters from A to Z and a to z as patterns representing the components of a date or time string. You can surround text in single quotes to avoid interpretation. The following table describes the defined letters:

Letter	Component	Presentation	Example
G	Era designator	Text	AD
y	Year	Year	1996 or 96
M	Month in year	Month	July or Jul or 07
w	Week in year	Number	27
W	Week in month	Number	2
D	Day in year	Number	189
d	Day in month	Number	10
F	Day of week in month	Number	2
E	Day in week	Text	Tuesday or Tue
a	AM/PM marker	Text	PM
H	Hour in day (0–23)	Number	0
k	Hour in day (1–24)	Number	24
K	Hour in AM/PM (0–11)	Number	0
h	Hour in AM/PM (1–12)	Number	12
m	Minute in hour	Number	30
s	Second in minute	Number	55
S	Millisecond	Number	978
z	Time zone	General time zone	Pacific Standard Time or PST or GMT-08:00
Z	Time zone	RFC 822 time zone	–0800

All other characters from A to Z and a to z are reserved.  
EMC Documentum

Make use of rules for presentations to determine formatting. The following table describes how different string contexts affect a presentation:

Presentation	Rule
Text	<p>If the number of pattern letters is 4 or more, the full form is used.</p> <p>Otherwise a short form is used if available.</p> <p>For parsing, both forms are accepted independent of the number of pattern letters.</p>
Number	<p>The number of pattern letters is the minimum number of digits required. If there are not enough numbers, the amount is zero-padded.</p> <p>For parsing, the number of pattern letters is ignored unless needed to separate adjacent fields.</p>
Year	<p>If the number of pattern letters is 2, the year is truncated to 2 digits.</p> <p>Otherwise the year is treated as a number.</p> <p>For parsing with the abbreviated year pattern (y or yy), the year is abbreviated relative to the century. The date is adjusted to be between 80 years before and 20 years after the creation of the SimpleDateFormat instance.</p> <p>For example, if a date using the format MM/dd/yy is created January 1, 1997, the string 0/11/12 is treated as January 11, 2012. The string 05/04/64 is treated as May 4, 1964.</p> <p>Note that a string must consist of exactly two digits as defined by <code>Character.isDigit(char)</code> to be parsed into the default century. Other numeric strings, such as a single-digit string, are parsed literally. For example, 01/02/3 is treated as January 2, 3 AD.</p>
Month	<p>If the number of pattern letters is 3 or more, the month is treated as text.</p> <p>Otherwise the month is treated as a number.</p>
General time zone	<p>If the time zone has a name, it is treated as text.</p> <p>If the time zone represents a GMT offset value, the following syntax is used:</p> <p><code>GMTOffsetTimeZone: GMT Sign Hours: Minutes</code></p> <p>Where <i>Sign</i> is + or -, <i>Hours</i> is between 0 and 23, and <i>Minutes</i> is between 0 and 59.</p>

Presentation	Rule
	For parsing take digits from the Basic Latin block of the Unicode standard. The locale is independent. RFC 822 time zones are accepted for parsing.
RFC 822 time zone	For formatting use the following syntax:  RFC822TimeZone: <i>Sign TwoDigitHours Minutes</i>  Where <i>Sign</i> is + or -, <i>TwoDigitHours</i> is between 00 and 23, and <i>Minutes</i> is between 0 and 59.

Use the following table for examples of how D2 interprets date and time pattern strings:

Date and Time Pattern	Result
yyyy.MM.dd G 'at' HH:mm:ss z	2001.07.04 AD at 12:08:56 PDT
EEE, MMM d, 'yy	Wed, Jul 4, '01
h:mm a	12:08 PM
hh 'o'clock' a, zzzz	12 o'clock PM, Pacific Daylight Time
K:mm a, z	0:08 PM, PDT
yyyyy.MMMMM.dd GGG hh:mm aaa	02001.July.04 AD 12:08 PM
EEE, d MMM yyyy HH:mm:ss Z	Wed, 4 Jul 2001 12:08:56 -0700
yyMMddHHmmssZ	010704120856-0700



## Widgets Reference

This chapter contains the following topics:

- [List of Widgets](#)

### List of Widgets

Use internal repository navigation widgets as described in the following table:

Name in D2 Config	Name in D2 Client	Description
BrowserWidget	Browser	Displays cabinets and folders. Enables uncluttered browsing of a repository tree. Required for use in a workspace when an IntelligentURL locateID is used to locate a document or folder object.
DoclistWidget	Document list	Displays content and virtual documents. Enables full browsing and content-seeking capabilities. Use this widget to access the content context menu. Displays results from Quick search and Predefined search widgets.
DocgalleryWidget	Thumbnail	Enables thumbnail previews for browsing content. You must set up a thumbnail server to show and customize thumbnails.
PDFViewerWidget	PDF Viewer	Displays the PDF rendition of selected content. The widget displays a message if a PDF rendition is not found for selected content. The widget downloads the file from the application server even if you install and enable a BOCS server.

Name in D2 Config	Name in D2 Client	Description
FavoritesWidget	Favorites	Displays a list of content marked as favorite.
CheckoutDocumentWidget	Checkout	Displays a list of checked-out content with user name and time of checkout.
CenterStageWidget	CenterStage browser	Enables browsing of CenterStage spaces. Only displays the Collaboration folder.
CommentsWidget	Comments	Enables viewing, creating, deleting, and replying to comments about content.
RecycleBinWidget	Recycle Bin	Enables managing and restoring deleted content. If you have administrator privileges, you can access the recycle bins of other users.

Use search widgets as described in the following table:

Name in D2 Config	Name in D2 Client	Description
QuickSearchWidget	Quick search	Enables full-text searches.
SearchFormWidget	Search query form	Enables using pre-configured query form searches. Administrators configure an instance of the search query form widget for each query form option. Select the widget instance that matches the query form search you want to use.
SearchWidget	Searches	Enables viewing, editing, and running past and saved searches.

Use internal content properties widgets as described in the following table:

Name in D2 Config	Name in D2 Client	Description
PropertiesWidget	Properties	Displays properties of the selected content.
DetailsLocationsWidget	Locations	Displays a list of directory locations in which the selected content is found.
DetailsVersionsWidget	Versions	Displays a list of the versions of the selected content.
DetailsRenditionsWidget	Renditions	Displays a list of renditions of the selected content.

Name in D2 Config	Name in D2 Client	Description
DetailsRelationsWidget	Relations	Displays a list of what is linked to the selected content. This widget manages content distribution by allowing you to start distributions, edit the list of recipients, and generate reports.
DistributionWidget	Distribution	Displays a list of distributions sent to the user. This widget allows you to accept, reject, and stop distribution tasks.
DetailsAuditWidget	Audit	Displays a list of audited actions for the selected content.
ThumbnailWidget	Preview	Displays the selected content as a slideshow.  You must set up an ADTS rendition server to render previews and storyboards.
VirtualDocumentWidget	Virtual document	Displays virtual document structure.
	Snapshots	Displays a list of virtual document snapshots for a virtual document selected in a Doclist or Virtual document widget.
DetailsRetentionsWidget	Retentions	Displays retention policies applied to the selected content.
DetailsMarkupsWidget	Markups	Displays markup policies for the selected content.

Use internal workflow widgets as described in the following table:

Name in D2 Config	Name in D2 Client	Description
TaskFoldersWidget	Tasks browser	Displays a list of tasks sorted by category that have been assigned to you.  Use this widget to refresh the Workflow task list widget.
WorkflowOverviewWidget	Workflow history	Displays a list of past and current events to show workflow progress.  You must have at least queue manager permission to access this widget.
TasksWidget	Workflow task list	Displays a list of tasks that have been assigned to you.  Use this widget to access the workflow context menu.

<b>Name in D2 Config</b>	<b>Name in D2 Client</b>	<b>Description</b>
TaskDetailsWidget	Task details	Displays the subject and message of selected task.
TaskNotesWidget	Task notes	Displays a list of accompanying notes to the selected workflow.
TaskAttachmentWidget	Task attachment	Displays a list of content attached to the selected task.
TaskPerformersWidget	Workflow performers	Displays a list of users organized by groups assigned to the workflow.

Use administration widgets as described in the following table:

<b>Name in D2 Config</b>	<b>Name in D2 Client</b>	<b>Description</b>
AdminUsersWidget	User	Displays a list of users for the repository.  Use this widget to add, edit, and remove user accounts and to change group memberships.
AdminGroupsWidget	Group	Displays a list of user groups for the repository.  Use this widget to add or edit user groups.
AdminDictionariesWidget	Dictionaries	Displays a list of repository dictionaries.  Use this widget to view, export, and configure dictionaries and values.
AdminTaxonomiesWidget	Taxonomies	Displays a list of repository taxonomies.  Use this widget to view, export, and configure taxonomies and values.

## Jobs Reference

This chapter contains the following topics:

- [List of D2 Jobs](#)
- [List of C2 Jobs](#)

### List of D2 Jobs

D2 installs Documentum jobs to the repository during installation. You can configure jobs in external software, such as Documentum Administrator, to perform scheduled tasks. The following table describes the jobs available to D2.

<p><b>Name:</b> D2ImportDictionary</p> <p><b>Description:</b> Import or update dictionaries from Excel or .csv documents.</p> <p><b>Frequency:</b> Once per day</p> <p><b>Default state:</b> Inactive</p>	<p><b>Parameters</b></p> <ul style="list-style-type: none"><li>• <b>folder:</b> Path of folders containing the files separated by comma.</li><li>• <b>separator:</b> Defines the separating character for .csv documents.</li><li>• <b>overwrite:</b> Enables erasing the dictionary.</li><li>• <b>sorted:</b> Enables sorting the dictionary.</li><li>• <b>update:</b> Enables updating autolinking with the imported dictionary.</li></ul>
---	--

<p><b>Name:</b> D2JobImportTaxonomy</p> <p><b>Description:</b> Import or update taxonomies from Excel or .csv documents.</p> <p><b>Frequency:</b> Once per day</p> <p><b>Default state:</b> Inactive</p>	<p><b>Parameters</b></p> <ul style="list-style-type: none"><li>• <b>folder:</b> Path of folders containing the files separated by comma.</li><li>• <b>separator:</b> Defines the separating character for .csv documents.</li></ul>
--	---

<p><b>Name:</b> D2CreateRendition</p> <p><b>Description:</b> Request rendition of content and its components.</p> <p><b>Frequency:</b> Once per hour</p> <p><b>Default state:</b> Inactive</p>	<p><b>Parameters</b></p> <ul style="list-style-type: none"> <li>• <b>id:</b> The content ID.</li> </ul>
<p><b>Name:</b> D2JobImportMassCreate</p> <p><b>Description:</b> Import and fill content with Documentum properties based on XML files linked to each file.</p> <p>XML files must be composed of a root element, document attribute files, and repeating attributes listed under the value tag.</p> <p><i>filename-meta.xml</i> enables import of XML content as well as metadata.</p> <p><b>Frequency:</b> Once per day</p> <p><b>Default state:</b> Inactive</p>	<p><b>Parameters</b></p> <ul style="list-style-type: none"> <li>• <b>folder:</b> Path of folders containing the files separated by comma.</li> <li>• <b>imported_file_folder:</b> Optional parameter for defining the folder to place successfully imported files. The default setting creates a folder within the source folder.</li> <li>• <b>createconfig:</b> Optional parameter for setting the <code>object_name</code> of the creation profile to use. Default setting uses the <code>r_object_type</code> found in the XML file. <i>Documentum Content Server Fundamentals</i> contains further information about <code>r_object_type</code>.</li> <li>• <b>args:</b> Sets the document type to use for values. The parameter is only required when you set a <code>createconfig</code>.</li> <li>• <b>async:</b> Use asynchronous creation. Default setting is false. This parameter is no longer used due to the usage of <b>D2JobCoreDeQueue</b>.</li> <li>• <b>naming:</b> By default, apply naming during the creation process. Set false to apply naming when properties are regenerated.</li> <li>• <b>unicity:</b> By default, control is deactivated after naming. Set true to activate control.</li> </ul>
<p><b>Name:</b> D2JobCoreDeQueue</p> <p><b>Description:</b> Apply D2CoreMethod on content located in <code>d2c_mass_create_queue</code>.</p> <p><b>Frequency:</b> Once per day</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <ul style="list-style-type: none"> <li>• <b>scan_queue:</b> By default, executes a scan on the queue. Set false to prevent the scan.</li> <li>• <b>naming:</b> By default, apply naming after the queue is scanned. Set false to apply naming when properties are regenerated.</li> <li>• <b>create:</b> Executes naming by simulating content creation.</li> </ul>

<p><b>Name:</b> D2JobDocbaseUpdate</p> <p><b>Description:</b> Update autolinking after a dictionary modification. Update requests are posted in the <code>d2_update_docbase_queue</code></p> <p><b>Frequency:</b> Once per day</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <p>None.</p>
<p><b>Name:</b> D2JobLifecycleBatch</p> <p><b>Description:</b> Change the lifecycle state of content based on context.</p> <p><b>Frequency:</b> Once per day</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <p>None.</p>
<p><b>Name:</b> D2JobMailing</p> <p><b>Description:</b> Send mail based on context.</p> <p><b>Frequency:</b> Once per day</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <p>None.</p>
<p><b>Name:</b> D2JobRemoveEmpty-Folder</p> <p><b>Description:</b> Remove empty folders from the repository.</p> <p><b>Frequency:</b> Once per day</p> <p><b>Default state:</b> Inactive</p>	<p><b>Parameters</b></p> <ul style="list-style-type: none"> <li>• <code>paths</code>: List of paths in the repository to scan separated by a comma.</li> <li>• <code>parameters</code>: Specifies the <code>dm_folder</code> subtype to delete. Default setting is <code>dm_folder</code>.</li> </ul>
<p><b>Name:</b> D2JobWFCleanerWorkflows</p> <p><b>Description:</b> Clean the data of groups and aliases created dynamically by workflows when the workflow has ended. <code>d2_workflow_tracker</code> changes to the ended state.</p> <p><b>Frequency:</b> Once per day</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <p>None.</p>

<p><b>Name:</b> D2JobWFLaunchScheduledWorkflows</p> <p><b>Description:</b> Scan all <code>d2_workflow_tracker</code> states for waiting and launches workflows. <code>d2_workflow_tracker</code> changes to the ongoing state.</p> <p><b>Frequency:</b> Once per day</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <p>None.</p>
<p><b>Name:</b> D2JobWFReceiveTaskMail</p> <p><b>Description:</b> Scan email accounts, recover messages, and extract job identification of tasks. Receive responses from external tasks by mail.</p> <p><b>Frequency:</b> Every 15 minutes</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <p>None.</p>
<p><b>Name:</b> D2JobWFSendTaskMail</p> <p><b>Description:</b> Scan email accounts, recover messages, and extract job identification of tasks. Send external tasks by mail.</p> <p><b>Frequency:</b> Every 15 minutes</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <p>None.</p>
<p><b>Name:</b> D2JobWFWorkflowsNotifications</p> <p><b>Description:</b> Send notification if workflow has not ended after the planned end date.</p> <p><b>Frequency:</b> Once per day</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <ul style="list-style-type: none"><li>• <code>pause</code>: Sets an interval in milliseconds between each mail sent to reduce overload.</li></ul>

<p><b>Name:</b> D2JobWFCleanPopHistory</p> <p><b>Description:</b> Clean email history table <code>d2_wf_pop</code> and alert administrators of possible bugs in reject and accept messages. Specific to Domino server.</p> <p><b>Frequency:</b> On demand, or once per month.</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <ul style="list-style-type: none"> <li>• <code>month_offset</code>: Sets the number of months to clean.</li> <li>• <code>full_purge</code>: By default, deletes all mails flagged as a potential problem. Set to <code>false</code> to prevent full purge.</li> </ul>
<p><b>Name:</b> D2JobDelegation</p> <p><b>Description:</b> Delegate all pending tasks for a user.</p> <p><b>Frequency:</b> Once per hour</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <p>None.</p>
<p><b>Name:</b> D2JobClean</p> <p><b>Description:</b> Delete unused <code>dm_acl</code> objects and annotations.</p> <p><b>Frequency:</b> Once per day</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <ul style="list-style-type: none"> <li>• <code>clean_native_note</code>: By default, enables cleaning of annotations. Set <code>false</code> to ignore annotations.</li> </ul>
<p><b>Name:</b> D2JobCore</p> <p><b>Description:</b> Re-apply configurations to existing objects.</p> <p><b>Frequency:</b> Once per day</p> <p><b>Default state:</b> Inactive</p>	<p><b>Parameters</b></p> <ul style="list-style-type: none"> <li>• <code>dql_filter select r_object_id from dm_document</code>: Set a DQL filter to select objects related to the job.</li> <li>• <code>create</code>: By default, does not apply the job to content during creation. Set <code>true</code> to apply during creation.</li> <li>• <code>naming</code>: If <code>create</code> is <code>true</code>, by default apply naming during creation. Set <code>false</code> to avoid applying naming.</li> <li>• <code>autolink</code>: By default, applies autolink for property regeneration. Set <code>false</code> to avoid property regeneration.</li> <li>• <code>security</code>: By default, applies security to the job. Set <code>false</code> to avoid applying security.</li> <li>• <code>apply_for_vd</code>: By default, does not apply the job to child content. Set <code>true</code> to apply to child content.</li> </ul>

<p><b>Name:</b> D2JobSubscription</p> <p><b>Description:</b> Process items from d2_subscription_queue to send notifications for events.</p> <p><b>Frequency:</b> Every 5 minutes</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <p>None.</p>
--	---------------------------------------

<p><b>Name:</b> D2JobSubscriptionSend-Mail</p> <p><b>Description:</b> Process items from d2_subscription_queue to send notifications for events if notification differed is selected in the subscription component.</p> <p><b>Frequency:</b> Every 5 minutes</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <p>None.</p>
--	---------------------------------------

## List of C2 Jobs

<p><b>Name:</b> C2JobRendition</p> <p><b>Description:</b> Create a C2 static rendition if a C2 method does not create the file. Launching the job adds a static rendition request to the queue.</p> <p><b>Frequency:</b> Once per hour</p> <p><b>Default state:</b> Active</p>	<p><b>Parameters</b></p> <p>None.</p>
--	---------------------------------------

## Custom Actions Reference

This chapter contains the following topics:

- [List of Custom Actions](#)

### List of Custom Actions

You can use custom actions when configuring GUI buttons. The following table describes the actions available for use:

Action	Parameters	Parameter description
launchIE	sType: select the window mode to use.	Set modal, modeless, or window.
	sURL: type the URL to be opened in a new window.	Add to the URL doctype (current repository name), adminlogin (Documentum administrator name), adminticket (administrator connection ticket), login (current user login), ticket (current user ticket), domain (domain name), and id (list of IDs separated by a comma).
	sFeatures: specify the features of the opened window.	<p>For modal or modeless windows:</p> <ul style="list-style-type: none"><li>• dialogHeight: set the height in pixels.</li><li>• dialogLeft: set the left position relative to the top-left corner.</li><li>• dialogTop: set the top position relative to the top-left corner.</li><li>• dialogWidth: set the width in pixels.</li><li>• center: yes, no, 1, 0, on, or off to specify whether to center the window or not. Default setting is yes.</li></ul> <p>For window mode:</p> <ul style="list-style-type: none"><li>• directories: yes or no to show navigation buttons.</li></ul>

Action	Parameters	Parameter description
		<ul style="list-style-type: none"> <li>location: yes or no to show the address bar.</li> <li>menubar: yes or no to show the menu bar.</li> <li>resizable: yes or no to enable modification of the window size.</li> <li>scrollbars: yes or no to show scroll bar.</li> <li>status: yes or no to show status bar.</li> <li>toolbar: yes or no to shown toolbar.</li> <li>width: set the width in pixels.</li> <li>height: set the height in pixels.</li> </ul>
	bUseAdmin: add parameters adminlogin and adminticket to the URL.	Boolean.
launchApp: for security reasons, you can only use the function if canUseAdminInLaunchApp is enabled in D2-Client.properties.	sPath: set the path of the executable of the app you want to run.	Use \\ instead of \ in the path. For example c:\\Documentum\\Checkout\\Laborantum\\Copy_Struct.exe
	bIsBlocking: indicate if the executable blocks D2.	Boolean.
	bUseAdmin: indicate if the administrator's session must be used.	Boolean.
	bNeedOtherSelection: enable opening of a document browser to set a second selection in the repository.	Boolean.
launchMethod: launch a method once on all Documentum content. The list of content IDs is in the parameter selectedIds.	sMethodName: set the name of the method to launch.	Type the method name.
	bRefresh: set whether to refresh D2-Client after method launch.	Boolean.
	sParameters: define the list of parameters.	For example, parameter1=xxx&parameter2=yyy
	bLaunchAsync: set whether to use an asynchronous launch.	Boolean.

Action	Parameters	Parameter description
launchMethodOnEachIds: launch a method on each selected Documentum content. The content ID is the parameter id.	sMethodName: the name of the method to launch.	Type the method name.
	bRefresh: refresh D2-Client after the method is run.	Boolean.
	sParameters: define the list of parameters.	For example, parameter1=xxx&parameter2=yyy
	bLaunchAsync: set whether to use an asynchronous launch.	Boolean.

Parameters starting with an *s* are strings and must be enclosed in single quotes. Parameters beginning with a *b* are Boolean and can be set as `true` or `false`.



## Widget Communication Channel Reference

This chapter contains the following topics:

- [List of Widget Communications Channels](#)

### List of Widget Communications Channels

Widgets use communication channels to send messages, which contain strings of information that dictate interaction between widgets and repositories.

Select a communication channel when creating and configuring external widgets as described in the following table:

Channel name	When an end user or D2	Parameters and notes for focus events
D2_EVENT_CUSTOM	Uses an external widget. D2 uses the event to communicate between widgets.	Parameters depend on the custom event and should be added to allow subscribers to identify the specific events.
D2_EVENT_DM_TICKET_GENERATED	Sends a message using D2_ACTION_DM_TICKET_GENERATE	<p>ticket: Documentum ticket.</p> <p>ticket_timeout: Documentum ticket timeout in milliseconds.</p> <p>ticket_time_generated: Time of ticket generation in posix time.</p> <p>ticket_time_expiration: Time of ticket expiration in posix time.</p>
D2_EVENT_SELECT_OBJECT	Selects content.	<p>parentId: ID of the parent object.</p> <p>parentType: Type of the parent object.</p>
D2_EVENT_SELECT_OBJECTS	Selects multiple content.	oam_id: List of object IDs separated by SEPARATOR_VALUE.

Channel name	When an end user or D2	Parameters and notes for focus events
D2_EVENT_LOCATED_OBJECT	Locates content.	oam_id: ID of the object. locationType: Location type, such as the widget type in which the content is shown. locateId: ID of the object to locate. locateName: Name of the object to locate. version: Version of the object to locate. chronicleId: ChronicleID of the object to locate. collapseId: List of IDs of the folders to reload.
D2_EVENT_LOCATED_SEARCH	Locates a search.	oam_id: ID of the object.
D2_EVENT_LOCATED_TASK	Locates a task.	oam_id: ID of the object.
D2_EVENT_OBJECT_DESTROYED	Destroys content.	oam_id: List of object IDs separated by SEPARATOR_VALUE.
D2_EVENT_OBJECT_CREATED	Creates content.	The channel only applies to the Doclist widget. oam_id: ID of the folder. pathId: Path ID of the object. For example, /reponame/0c0d04e580000105/0b0d04e580055dd8
D2_EVENT_COMMENT_ADDED	Creates a comment.	The channel only applies to the Comments widget. comment: ID of the comment.
D2_EVENT_FILTER_CHANGED	Changes the global filter of the workspace.	
D2_EVENT_CHECKOUT_STATE_CHANGED	Changes content checkout state.	
D2_EVENT_PREFERENCES_CHANGED	Changes their user preferences.	
D2_EVENT_PREFERENCES_LOADED	Loads their user preferences.	
D2_EVENT_WIDGET_GET_FOCUS	Clicks on a widget.	

Channel name	When an end user or D2	Parameters and notes for focus events
D2_EVENT_WIDGET_FOCUS	D2 sets a widget to active.	<p><code>config</code>: Widget configuration name.</p> <p><code>widgetType</code>: set the value to the widget type.</p> <p>If you want to set a specific instance of a widget, use <code>config</code> and set the value to the widget name.</p>
D2_EVENT_SEARCH_RUN	Runs a search.	<p>The channel only applies to the Searches widget and the Doclist widget.</p> <p><code>oam_id</code>: ID of the search..</p> <p><code>searched_type</code>: Search type.</p>
D2_EVENT_SEARCH_SAVED	Saves a search.	<p>The channel only applies to the Searches widget.</p> <p><code>oam_id</code>: ID of the search..</p> <p><code>is_public</code>: Set to <code>true</code> if the search is public or shared.</p>
D2_EVENT_SEARCH_CATEGORY_CREATED	Creates a search category.	The channel only applies to the Searches widget.
D2_EVENT_WORKFLOW_ABORTED	Aborts a workflow.	<p>The channel only applies to the Searches widget.</p> <p><code>oam_id</code>: List of object IDs separated by <code>SEPARATOR_VALUE</code>.</p> <p><code>widgetType</code>: set the value to the widget type associated with the event.</p>
D2_EVENT_SELECT_TASK	Selects a task.	<code>oam_id</code> : ID of the task.
D2_EVENT_SELECT_TASK_FOLDER	Selects a folder in the task manager widget.	<p>The channel activates task details, task attachments, and task notes.</p> <p><code>oam_id</code>: ID of the task folder.</p>
D2_EVENT_SELECT_TASK_NOTE	Selects a note in the task notes widget.	<p>The channel only applies when communicating from the Task browser widget to the Task list widget.</p> <p><code>oam_id</code>: ID of the task note.</p>

Channel name	When an end user or D2	Parameters and notes for focus events
D2_EVENT_SELECT_TASK_PERFORMER	Selects a performer in the task performers widget.	oam_id: ID of the task performed. The following are copied from the selected item: icon id locked style thumbnail version immutable: D2 sets this to true if the item is immutable.
D2_EVENT_TASK_READ_STATE_CHANGED	Changes the read state of a task.	oam_id: ID of the task. locateId: ID of the task to locate. parentId: ID of the parent task.
D2_EVENT_TASK_PRIORITY_CHANGED	Changes the priority of a task.	oam_id: ID of the task. parentId: ID of the parent task.
D2_EVENT_TASK_PROCESSED	Forwards or rejects a task.	oam_id: ID of the task.
D2_EVENT_WIDGET_INITIALIZED	Opens a widget.	
D2_EVENT_WORKSPACE_CLOSED	Closes a workspace.	oam_cuid: Uid of the workspace tab that was closed.
D2_EVENT_THEME_CHANGED	Changes a workspace theme.	oam_cuid: Uid of the container. The following are copied from the theme: background_color background_color_type background_color_gradient_end background_color_gradient_start background_color_texture_name header_color label: Theme label.

Channel name	When an end user or D2	Parameters and notes for focus events
		name: Theme name. selection_blur_color selection_color border_color title_color tab_active_color tab_border_color tab_inactive_color dialog_background_white: D2 sets this to true if the dialog background is white. tab_colored_text: Boolean for whether the tabs use colored text.
D2_EVENT_RENDITION_ADDED	Creates a different rendition of content.	The channel only applies to the Renditions widget. oam_id: ID of the content.
D2_EVENT_IFRAME_ACTIVE	Activates an iframe.	oam_value: Boolean to indicate if the iframe is activated or deactivated.
D2_EVENT_IFRAME_INIT	Opens an iframe.	channels: List of events. D2_EVENT_THEME_CHANGED contains information about the iframe theme.
D2_EVENT_SELECT_TAXONOMY	Selects a taxonomy.	The channel only applies to the Properties widget. oam_id: ID of the taxonomy. The event copies the taxonomy item attributes.
D2_EVENT_SELECT_DICTIONARY	Selects a dictionary.	The channel only applies to the Properties widget. oam_id: ID of the dictionary. The event copies the dictionary item attributes.

Channel name	When an end user or D2	Parameters and notes for focus events
D2_EVENT_SELECT_USER	Selects a user.	The channel only applies to the Properties widget. oam_id: ID of the user. The event copies the user item attributes.
D2_EVENT_USER_CREATED	Creates a user.	The channel only applies to the Users widget. oam_id: ID of the user.
D2_EVENT_SELECT_GROUP	Selects a group.	The channel only applies to the Properties widget. oam_id: ID of the group. The event copies the group item attributes.
D2_EVENT_GROUP_CREATED	Creates a group.	The channel only applies to the Groups widget. oam_id: ID of the group.
D2_EVENT_SELECT_RELATION	Selects a relation.	The channel only applies to the Relations widget. oam_id: ID of the relation. The event copies the relation item attributes.
D2_EVENT_SELECT_RENDITION	Selects a rendition in the rendition widget.	The channel only applies to the Renditions widget. oam_id: ID of the rendition. The event copies the rendition item attributes.
D2_EVENT_SELECT_RETENTION	Selects a retention policy.	The channel only applies to the Retentions widget. oam_id: ID of the retention policy. The event copies the retention policy item attributes.
D2_EVENT_SELECT_MARKUP	Selects a markup policy.	oam_id: ID of the markup policy. The event copies the markup policy item attributes.

Channel name	When an end user or D2	Parameters and notes for focus events
D2_EVENT_SELECT_SEARCH	Selects a saved search.	<p>The channel only applies to the Doclist widget.</p> <p>oam_id: ID of the search.</p> <p>The event copies the search item attributes.</p>
D2_EVENT_SELECT_FACET	Selects a facet.	<p>The channel only applies to the Doclist widget.</p> <p>oam_id: ID of the facet.</p> <p>The event copies the facet item attributes.</p>
D2_EVENT_SELECT_QUERY-FORM	Selects a query form search.	<p>The channel only applies to the Doclist widget.</p> <p>oam_id: ID of the query form search.</p> <p>The event copies the query form search item attributes.</p>
D2_EVENT_SELECT_DISTRIBUTION	Selects a distribution.	<p>oam_id: ID of the distribution.</p> <p>The event copies the distribution item attributes.</p>
D2_EVENT_SELECT_WORKFLOWTRACKER	Selects a workflow overview.	<p>oam_id: ID of the workflow overview.</p> <p>The event copies the workflow overview item attributes.</p>
D2_EVENT_SELECT_WORKFLOW_ACTIVITY	Selects a workflow activity.	<p>oam_id: ID of the workflow activity.</p> <p>The event copies the workflow activity item attributes.</p>
D2_EVENT_SELECT_AUDIT	Selects an audit event.	<p>oam_id: ID of the audit.</p> <p>The event copies the audit item attributes.</p>
D2_EVENT_SELECT_SNAPSHOT	Selects a virtual document snapshot.	<p>The channel only applies to the Snapshots widget.</p> <p>oam_id: ID of the virtual document snapshot.</p> <p>The event copies the virtual document snapshot item attributes.</p>

Channel name	When an end user or D2	Parameters and notes for focus events
D2_EVENT_VD_TEMPLATE_SELECTED	Selects a virtual document template form.	The channel only applies to the Snapshots widget.  oam_id: ID of the virtual document template.  The event copies the virtual document template item attributes.
D2_EVENT_DRAG_DROP_STARTED	Begins dragging and dropping.	oam_id: List of content IDs.
D2_EVENT_DRAG_DROP_ENDED	Stops dragging and dropping.	oam_id: List of content IDs.
D2_EVENT_IMPORTED_FROM_URL	Imports content from a URL.	oam_id: View position (0 if none).  cancelReason: Reason for cancellation if the operation is canceled.  result: Contains the result if the operation is completed.  error: Contains the error if the operation fails.
D2_EVENT_EXPORTED_FROM_URL	Exports content from a URL.	oam_id: View position (0 if none).  cancelReason: Reason for cancellation if the operation is canceled.  result: Contains the result if the operation is completed.  error: Contains the error if the operation fails.
D2_EVENT_DOWNLOAD_URLS_RECEIVED	Publishes a D2_ACTION_DOWNLOAD_URLS_REQUEST action.	urls: Contains a concatenated string of URLs.

Send messages through channels to provide information about an action to be performed on content as described in the following table:

Channel name	Requests that D2	Parameters and notes for focus events
D2_ACTION_OPEN_FOLDER	Opens a folder in the repository.	The channel only applies to the Doclist widget. oam_id: ID of the folder. collapseId: List of IDs of the folders to reload. pathId: Path ID of the object. For example, /reponame/0c0d04e58000105/0b0d04e580055dd8
D2_ACTION_OPEN_URL	Opens a URL in a new browser window.	url: the URL to open.
D2_ACTION_OPEN_VD	Opens a virtual document in the repository.	The channel only applies to the Virtual Documents widget. oam_id: ID of the virtual document.
D2_ACTION_OPEN_SNAPSHOT	Opens a virtual document snapshot.	The channel only applies to the Snapshots widget.
D2_ACTION_LOCATE_OBJECT	Locates content in the repository.	The channel only applies to the Locations widget. oam_id: ID of the content.
D2_ACTION_LOCATE_TASK	Locates a task.	The channel only applies to the Locations widget. oam_id: ID of the task.
D2_ACTION_LOCATE_SEARCH	Locates a saved search.	The channel only applies to the Locations widget. oam_id: ID of the task.
D2_ACTION_REFRESH_DOCUMENT	Refreshes content.	oam_id: ID of the content. import: Present if the refresh is related to the import.
D2_ACTION_COPY_LINK_IN_CLIPBOARD	Copies the smartlink to the content.	oam_id: ID of the content. type: Content type. parentType: Content type of the parent.
D2_ACTION_DUMP	Shows a dump of the content.	oam_id: ID of the content.
D2_ACTION_CONTENT_CHECKIN	Checks in the content.	oam_id: ID of the content.
D2_ACTION_CONTENT_IMPORT_AS_VERSION	Imports a new version of content.	oam_id: ID of the content.

Channel name	Requests that D2	Parameters and notes for focus events
D2_ACTION_CONTENT_CHECKIN_NATIVE_ANNOTATION	Checks in content as a native annotation.	oam_id: ID of the content.
D2_ACTION_CONTENT_PRINT	Prints content.	oam_id: ID of the content.
D2_ACTION_CONTENT_COMPARE	Compares two content.	oam_id: ID of the content.
D2_ACTION_CONTENT_EXPORT	Exports content.	oam_id: ID of the content. DOWNLOAD_LOCATION: Location for download.
D2_ACTION_CONTENT_EXPORT_NATIVE	Export content without including renditions or metadata.	oam_id: ID of the content. DOWNLOAD_LOCATION: Location for download.
D2_ACTION_CONTENT_EXPORT_FOLDER	Exports folder content.	oam_id: ID of the content. DOWNLOAD_LOCATION: Location for download.
D2_ACTION_CONTENT_EXPORT_FOLDER_NATIVE	Exports folder content without including renditions or metadata.	oam_id: ID of the content. DOWNLOAD_LOCATION: Location for download.
D2_ACTION_CONTENT_VIEW	Views content.	oam_id: ID of the content. DOWNLOAD_LOCATION: Location for download.
D2_ACTION_CONTENT_VIEW_NATIVE	Views content without renditions or metadata.	oam_id: ID of the content. DOWNLOAD_LOCATION: Location for download.
D2_ACTION_CONTENT_EDIT	Edits content.	oam_id: ID of the content. DOWNLOAD_LOCATION: Location for download.
D2_ACTION_CONTENT_CHECKOUT	Checks out content.	The channel only applies to the Checkout widget. oam_id: ID of the content. DOWNLOAD_LOCATION: Location for download.
D2_ACTION_CONTENT_CANCEL_CHECKOUT	Cancels the checkout of content.	oam_id: ID of the content. locateAndRefresh: Boolean to determine if the location and refresh occurred. refreshCheckoutState: Boolean to determine if the checkout state is refreshed.

Channel name	Requests that D2	Parameters and notes for focus events
D2_ACTION_CONTENT_EDIT_WITH_NATIVE_ANNOTATION	Edits content with native annotations.	oam_id: ID of the content.
D2_ACTION_CONTENT_VIEW_WITH_NATIVE_ANNOTATION	Views content with native annotations.	oam_id: ID of the content.
D2_ACTION_CONTENT_EDIT_NATIVE_ANNOTATION	Edits a native annotation.	oam_id: ID of the content.
D2_ACTION_COMMENT	Shows the comment creation dialog box.  Set <code>parentCommentId</code> as the parent comment.	The channel only applies to the Comments widget.  oam_id: ID of the content.  <code>parentCommendId</code> : ID of the parent comment.  <code>id</code> : ID of the comment.  <code>editor</code> : Richtext body of the comment.
D2_ACTION_CONTENT_CREATE	Shows the content creation dialog box.  Set <code>parentId</code> as the parent folder as the content location if no autolink is set.	oam_id: ID of the content used for properties inheritance.  <code>parentId</code> : ID of the parent folder. D2 creates content inside the specified folder if no autolink is set.
D2_ACTION_CONTENT_IMPORT	Shows the content import dialog box.  Set <code>parentId</code> as the parent folder as the content location if no autolink is set.	oam_id: ID of the content used for properties inheritance.  <code>parentId</code> : ID of the parent folder. D2 creates content inside the specified folder if no autolink is set.  <code>files</code> : list of files on the client machine.
D2_ACTION_FOLDER_CREATE	Shows the folder creation dialog box.  Set the <code>root_object_type</code> to <code>dm_folder</code> or <code>dm_cabinet</code> .	oam_id: ID of the folder in which the new folder is being created.  <code>root_object</code> : set to <code>dm_folder</code> or <code>dm_cabinet</code> to specify the folder type.
D2_ACTION_OBJECT_DESTROY	Shows the content destruction dialog box.  Set <code>parentCommentId</code> as the parent content.	oam_id: ID of the content.
D2_ACTION_PERMISSIONS_SHOW	Shows the permissions dialog box.	oam_id: ID of the content.

Channel name	Requests that D2	Parameters and notes for focus events
D2_ACTION_RENDITION_ADD	Shows the add rendition dialog box.	oam_id: ID of the content.
D2_ACTION_RENDITION_REQUEST	Requests a rendition.	oam_id: ID of the content.
D2_ACTION_RELATION_CREATE	Shows the relationship creation dialog box.	oam_id: ID of the content.
D2_ACTION_RELATION_DESTROY	Shows the relationship destruction dialog box.  Set <code>associate_id</code> as the ID of the relation to destroy.	oam_id: ID of the content.  <code>associate_id</code> : ID of the relation.
D2_ACTION_MASS_UPDATE	Runs a mass update configuration.  Set <code>config_name</code> as the name of the mass update configuration.	oam_id: ID of the content.  <code>config_name</code> : name of the mass update configuration.
D2_ACTION_SYNCPLICITY	Shows the Syncplicity dialog box.	oam_id: ID of the content.
D2_ACTION_CUT	Performs a cut operation.	oam_id: ID of the content.  <code>parentId</code> : ID of the parent content.
D2_ACTION_COPY	Performs a copy operation.	oam_id: ID of the content.  <code>parentId</code> : ID of the parent content.
D2_ACTION_PASTE	Performs a paste operation.	<code>parentId</code> : ID of the parent content.
D2_ACTION_PASTE_LINK	Pastes a link of the clipboard content.	<code>parentId</code> : ID of the parent content.
D2_ACTION_CLIPBOARD_GET	Retrieves the clipboard content. This action triggers <code>D2_ACTION_CLIPBOARD_CONTENT</code> .	
D2_ACTION_CLIPBOARD_CONTENT	Performs an operation on the clipboard content.	<code>clipboard-operation</code> : Operation performed from the clipboard.  <code>clipboard-contentId</code> : ID of the clipboard content.  <code>clipboard-value</code> : Value of the clipboard content.
D2_ACTION_DOWNLOAD_URLS_REQUEST	Requests a list of document URLs for content.	oam_id: ID of the content.  <code>format</code> : Format of the content.  <code>pageModifier</code> : Page modifier.  <code>pagenumber</code> : Page number.

Channel name	Requests that D2	Parameters and notes for focus events
D2_ACTION_IMPORT_FROM_URL	Imports content from a URL.	oam_id: ID of the content. url: URL of the content. isModal: Set to true to make the content modal.
D2_ACTION_EXPORT_FROM_URL	Exports content from a URL.	oam_id: ID of the content. url: URL of the export location.. useViewLocation: Set to true to use the view location, otherwise the export opens the application selection dialog box. hasDataPost: Boolean to indicate whether the export operation has information in the dataPost parameter. dataPost: The values to post.
D2_ACTION_SENDMAIL	Sends mail.	oam_id: ID to send. You do not need to use oam_id if you used id. id: ID to send. type: Object type. parentType: Parent content type. Optional.
D2_ACTION_FAVORITE_ADD	Adds content to the list of favorites.	oam_id: ID of the content.
D2_ACTION_FAVORITE_REMOVE	Removes content from the list of favorites.	oam_id: ID of the content.
D2_ACTION_ACROBAT_ANNOTATION_OPEN	Opens an Adobe Acrobat annotation.	oam_id: ID of the content.
D2_ACTION_TICKET_GENERATE	Generates a Documentum ticket.	

Send messages through channels to perform interface actions as described in the following table:

Channel name	Requests that D2	Parameters and notes for focus events
D2_ACTION_DISPLAY_DIALOG	Shows a dialog box.	oam_id: ID of the dialog box. raw: A boolean that retrieves the raw oam_id content when set to true. Optional. DIALOG_NAME: Dialog box name.

Channel name	Requests that D2	Parameters and notes for focus events
		<p>MANAGER: Manager class name. Optional.</p> <p>parentType: Parent object type. Optional.</p> <p>mode: Create, edit, or import mode of the dialog box. Optional.</p>
D2_ACTION_EXECUTE_MANAGER	Executes a manager class for a dialog box.	<p>oam_id: ID of the dialog box.</p> <p>raw: A boolean that retrieves the raw oam_id content when set to true. Optional.</p> <p>DIALOG_NAME: Dialog box name.</p> <p>MANAGER: Manager class name.</p>
D2_ACTION_EXECUTE	Executes an action.	<p>rId: Returned ID. By default, this is set to the message ID.</p> <p>rType: Returned type (JS, NATIVE, or EVENT). By default, this does nothing.</p> <p>rAction: Returned action (inline Javascript, native function name, or event name). By default, this does nothing.</p> <p>eMode: Entry mode (set as SINGLE to call the action for one ID, MONO to call the action once for each ID, or MULTI to call the action once with a list of all provided IDs). By default, this is set to MULTI.</p> <p>eCall: Entry call for when eMode is set to MONO (set as SEQUENTIAL to call the actions one at a time by waiting for each service call to return or PARALLEL to call the actions at the same time). By default, this is set to SEQUENTIAL.</p> <p>eMethod: Name of the entry method. This is only required for D2FS services in conjunction with the eService parameter.</p>

Channel name	Requests that D2	Parameters and notes for focus events
		eService: Name of the plug-in interface service without the I prefix and Service suffix.
D2_ACTION_REFRESH_WIDGET	Refreshes the widget.	oam_id: ID of the widget. target_type: Widget type.
D2_ACTION_RELOAD_WORKSPACE	Refreshes the active workspace.	oam_id: ID of the workspace. option_same_repository: Determines if the workspace is in the same repository.
D2_ACTION_WIDGET_FULLSCREEN	Sets the widget to fullscreen view.	original_widget: Original widget ID. original_event: Original event ID. original_cuid: Original cuid. original_global: Original global ID. url: URL of the widget.

Send messages through channels to provide information about an action to be performed on distributions as described in the following table:

Channel name	Requests that D2	Parameters and notes for focus events
D2_ACTION_DISTRIBUTION_ACCEPT	Accepts the distribution. Set config_name as the distribution configuration name.	oam_id: ID of the content. config_name: name of the distribution.
D2_ACTION_DISTRIBUTION_REJECT	Rejects the distribution. Set config_name as the distribution configuration name.	oam_id: ID of the content. config_name: name of the distribution.
D2_ACTION_DISTRIBUTION_PREPARE	Prepares the distribution. Set config_name as the distribution configuration name.	oam_id: ID of the content. config_name: name of the distribution.
D2_ACTION_DISTRIBUTION_LAUNCH	Launches the distribution. Set config_name as the distribution configuration name.	oam_id: ID of the content. config_name: name of the distribution.
D2_ACTION_DISTRIBUTION_STOP	Stops the distribution. Set config_name as the distribution configuration name.	oam_id: ID of the content. config_name: name of the distribution.

Channel name	Requests that D2	Parameters and notes for focus events
D2_ACTION_DISTRIBUTION_REPORT	Reports the distribution. Set <code>config_name</code> as the distribution configuration name.	<code>oam_id</code> : ID of the content. <code>config_name</code> : name of the distribution.
D2_ACTION_SUBSCRIBE	Subscribes to a distribution.	<code>oam_id</code> : ID of the distribution.

Send messages through channels to provide information about an action to be performed on searches as described in the following table:

Channel name	Requests that D2	Parameters and notes for focus events
D2_ACTION_SEARCH_DOCUMENT	Searches the repository for content.	<code>oam_id</code> : ID of the search. <code>locateId</code> : ID of the object to search. <code>searched_type</code> : Search type name. <code>facet_attr_name</code> : Facet attribute name. <code>facet_attr_value</code> : Facet attribute value. <code>reset_facet_attr_name</code> : Reset the facet attribute name.
D2_ACTION_SEARCH_HIGHLIGHT_TERMS	Highlight search terms.	<code>oam_value</code> : Binary value for whether to highlight search terms (0 or 1).
D2_ACTION_ADVANCED_SEARCH	Shows the advanced search dialog box.	<code>oam_id</code> : ID of the search. If you set this to null, the action prompts the user to create a new advanced search.
D2_ACTION_SEARCH_CATEGORY_DIALOG	Shows the advanced search category dialog box.	
D2_ACTION_PREFERENCES_SHOW	Shows the user preferences dialog box.	
D2_ACTION_QUERY_FORM_SHOW	Shows the query form search dialog box.	<code>oam_id</code> : ID of the content.
D2_ACTION_QUERY_CATEGORY_DIALOG	Shows the query form search category dialog box.	

Send messages through channels to provide information about an action to be performed on virtual documents as described in the following table:

Channel name	Requests that D2	Parameters and notes for focus events
D2_ACTION_CONVERT_VD	Converts a document to a virtual document.	oam_id: ID of the content.
D2_ACTION_CONVERT_DOC	Converts a virtual document to a simple document.	oam_id: ID of the virtual document.
D2_ACTION_SNAPSHOT_CREATE	Creates a virtual document snapshot.	The channel only applies to the Snapshots widget. oam_id: ID of the virtual document.
D2_ACTION_VD_ADD_CHILD_SELECTED	Shows the add child dialog box.	
D2_ACTION_VD_REMOVED_CHILD_SELECTED	Shows the remove child dialog box.	
D2_ACTION_VD_SET_CHILD_BINDING_VERSION	Shows the binding version dialog box.	
D2_ACTION_VD_INSERT_INHERITED_COMPONENT	Shows the insert inherited component dialog box.	
D2_ACTION_VD_CLEAR_VD	Clears a virtual document of elements.	

Send messages through channels to provide information about an action to be performed on lifecycles and workflows as described in the following table:

Channel name	Requests that D2	Parameters and notes for focus events
D2_ACTION_LIFECYCLE_DCTM	Runs a lifecycle operation on a Documentum lifecycle.	oam_id: ID of the content. operation: the operation to perform. policyId: the policy to use.
D2_ACTION_LIFECYCLE_D2	Runs a lifecycle operation on a D2 lifecycle.	oam_id: ID of the content. operation: the operation to perform. policyId: the policy to use.
D2_ACTION_WORKFLOW_LAUNCH	Launches a workflow.	oam_id: ID of the content. config: name of the workflow configuration.
D2_ACTION_WORKFLOW_LAUNCH_SCHEDULED	Launches a workflow when scheduled.	oam_id: ID of the queue_item.

Channel name	Requests that D2	Parameters and notes for focus events
D2_ACTION_WORKFLOW_UPDATE_PERFORMERS	Shows the update performers dialog box.	oam_id: ID of the queue_item. workflowTrackerId: ID of the workflow tracker used if oam_id is not an ID2cWorkflowTracker or IDfQueueItemworkflow. Optional.
D2_ACTION_WORKFLOW_ABORT	Shows the abort workflow dialog box.	oam_id: ID of the workflow tracker.
D2_ACTION_TASK_ACQUIRE	Sets the task as acquired.	oam_id: ID of the task. parentId: ID of the parent task. forceAcquire: set to true to force acquisition. forceRead: set to true to force reading.
D2_ACTION_TASK_READ	Toggles the read or unread status of the task.	oam_id: ID of the task. parentId: ID of the parent task. read: set to true or false.
D2_ACTION_TASK_PRIORITY	Sets the task priority.	oam_id: ID of the task. parentId: ID of the parent task. priority: set to the priority integer.
D2_ACTION_TASK_FORWARD	Shows the task progression dialog box.	oam_id: ID of the task.
D2_ACTION_TASK_REJECT	Shows the task rejection dialog box.	oam_id: ID of the task.
D2_ACTION_TASK_DELEGATE	Shows the task delegation dialog box.	oam_id: ID of the task. source: set to tracker or task.
D2_ACTION_TASK_NOTE	Shows the task note dialog box.	The channel only applies to the Task notes widget. oam_id: ID of the task.
D2_ACTION_TASK_PROCESS	Shows the task processing dialog box. Set operation as the operation to perform.	oam_id: ID of the task. operation: the operation to perform.

Send messages through channels to provide information about an action to be performed on taxonomies and dictionaries as described in the following table:

Channel name	Requests that D2	Parameters and notes for focus events
D2_ACTION_TAXONOMY_EXPORT	Shows the taxonomy export dialog box.	oam_id: ID of the taxonomy.
D2_ACTION_TAXONOMY_IMPORT	Shows the taxonomy import dialog box.	oam_id: ID of the taxonomy.
D2_ACTION_TAXONOMY_CHECKIN	Shows the taxonomy checkin dialog box.	oam_id: ID of the taxonomy.
D2_ACTION_TAXONOMY_SAVE	Shows the taxonomy save dialog box.	oam_id: ID of the taxonomy.
D2_ACTION_TAXONOMY_PROPERTIES	Shows the taxonomy properties dialog box.	oam_id: ID of the taxonomy.
D2_ACTION_TAXONOMY_LOCATE	Searches for the taxonomy.	The channel only applies to the Locate widget. oam_id: ID of the taxonomy.
D2_ACTION_TAXONOMY_RESTORE	Shows the taxonomy restoration dialog box.	oam_id: ID of the taxonomy.
D2_ACTION_DICTIONARY_EXPORT	Shows the dictionary export dialog box.	oam_id: ID of the dictionary.
D2_ACTION_DICTIONARY_IMPORT	Shows the dictionary import dialog box.	oam_id: ID of the dictionary.
D2_ACTION_DICTIONARY_SAVE	Shows the dictionary save dialog box.	oam_id: ID of the dictionary.
D2_ACTION_DICTIONARY_RESTORE	Shows the dictionary restoration dialog box.	oam_id: ID of the dictionary.
D2_ACTION_DICTIONARY_UPDATE	Shows the dictionary update dialog box.	oam_id: ID of the dictionary.
D2_ACTION_DICTIONARY_PROPERTIES	Shows the dictionary properties dialog box.	oam_id: ID of the dictionary.

Send messages through channels to provide information about an action to be performed on users and groups as described in the following table:

Channel name	Requests that D2	Parameters and notes for focus events
D2_ACTION_OPEN_GROUP	Opens a group	oam_id: ID of the group.
D2_ACTION_GROUP_CREATE	Creates a group.	The channel only applies to the Groups widget.
D2_ACTION_GROUP_PROPERTIES	Sets the properties of a group.	The channel only applies to the Properties widget. oam_id: ID of the group.

## Widget Communication Channel Reference

---

<b>Channel name</b>	<b>Requests that D2</b>	<b>Parameters and notes for focus events</b>
D2_ACTION_USER_CREATE	Creates a user.	The channel only applies to the Users widget. oam_id: ID of the user.
D2_ACTION_USER_PROPERTIES	Sets the properties of a user.	The channel only applies to the Properties widget. oam_id: ID of the user.

## Reserved Words

This chapter contains the following topics:

- [List of Reserved Words in D2 when Using Documentum Application Builder](#)

## List of Reserved Words in D2 when Using Documentum Application Builder

Do not use the following words when defining objects and relations in Documentum Application Builder or Documentum Composer, as they conflict with the D2 property page component:

- abstract
- boolean
- break
- byte
- case
- catch
- char
- class
- const
- continue
- default
- delete
- do
- double
- else
- export
- extends
- instanceof
- int
- long
- native
- new
- null
- package
- private
- protected
- public
- return
- short
- static
- super
- switch
- synchronized
- this

- false
- final
- finally
- float
- for
- function
- goto
- if
- implements
- import
- in
- throw
- throws
- transient
- true
- try
- typeof
- var
- void
- while
- with

## PDF Fields Reference

This chapter contains the following topics:

- [List of PDF Fields](#)

### List of PDF Fields

Field	Description
#page	Current page
#page_count	Number of pages
#chapter	Chapter name
#datetime	Date and time of the client host
#username	Current user
#controled_username	Name of the user printing the content
#controled_username_count	Number of controlled prints by the current user
#controled_count	Total number of controlled prints
#reason	Reason for printing
#folder_path	First path of the document
#complete_name	First path of the document and name
#server_datetime	Server date and time
#docbase	Repository name
#version	Version number of the content
	Volume auto-link
<i>Property name</i> (for example, object_name)	Documentum single-value attribute
<i>Property name.dictionary name.language or alias name</i> (for example, object_name.dico1.fr)	Dictionary mapping
<i>Property name</i> (for example, keywords)	Comma-separated Documentum repeating-value attribute
<i>Property name[index]</i> (for example, keywords[0])	Repeating-value attribute
<i>Property name.dictionary name.language or alias name[index]</i> (for example, keyword[0].dico1.fr)	Dictionary mapping
<i>ID.Property name</i> (for example, dqlkey.object_name)	All recorded comma-separated values

<b>Field</b>	<b>Description</b>
<i>ID.Property name[index]</i> (for example, dqlkey.object_name[0])	Recorded value
<i>ID.Property name.dictionary name.language or alias name[index]</i> (for example, keyword[0].dicol.fr)	Dictionary mapping